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Hospital Survey and Plan
for the
State of Maryland

Maryland State Planning Commission
April-1948

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Hospital Survey and Plan
for the
State of Maryland

Prepared by the
HOSPITAL SURVEY COMMITTEE
of the
COMMITTEE ON MEDICAL CARE

state planning commission

Maryland State Planning Commission

April - 1948

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April 1, 1948

Honorable Wm. Preston Lane, Jr.
Governor of Maryland
Annapolis, Maryland

Dear Governor Lane:

I take great pleasure in transmitting herewith the "Hospital Survey and Plan for the State of Maryland," which was prepared by the Hospital Survey Committee of the State Planning Commission.

Under date of March 26, 1948, Dr. Thomas Parran, the Surgeon General of the United States Public Health Service, announced that "the Maryland State Plan meets the requirements of Section 623(a) of the Hospital Survey and Construction Act and is hereby approved."

Accordingly, the State of Maryland is entitled to a Federal allotment of \$870,300 annually for five years, which will be used for the construction of public and other nonprofit hospitals included in the State Plan. One third of the expenditures for each approved project will be provided by these Federal funds and two thirds by the local hospital sponsors.

Pursuant to Chapter 810 of the Acts of 1947, the State Board of Health has been charged with the responsibility of administering the Plan. Applications are currently being received for high-priority projects, and before long some of the State's most urgent needs for hospital and public health facilities should be realized.

In behalf of the Commission, I should like to make grateful acknowledgment of the valuable services rendered by the members of the Hospital Survey Committee, who contributed so generously of their time and experience in the consummation of the Plan. By surveying the hospital and public health needs of the State and proposing a long-term plan of construction and improvements, they have made a lasting contribution to the health and welfare of the people of Maryland.

I should like also to take the opportunity to thank you for the warm encouragement and cooperation you have given to the State Planning Commission in every step of this important undertaking.

Respectfully yours,

A handwritten signature in cursive script, reading "Henry P. Irr".

Henry P. Irr, *Chairman*



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December 18, 1947

Mr. Henry P. Irr, Chairman
Maryland State Planning Commission
104 Equitable Building
Baltimore 2, Maryland

Dear Mr. Irr:

In accordance with your recent request, the Committee on Medical Care has studied and reviewed the Report of the Hospital Survey Committee.

As required by the provisions of the Hospital Survey and Construction Act, a public hearing was held on December 4, 1947, notice of which appeared in most of the newspapers of the State. In addition, notices of the hearing were mailed to all existing hospitals, all persons known to be interested in developing new hospitals, county health officers, members of the Legislature, and other interested and representative groups. Before a large and interested audience, the important phases of the hospital construction program outlined in the Report of the Hospital Survey Committee were explained in detail. In the discussions which followed the presentation of the various sections of the Report no new ideas were presented, nor were any objections made to the provisions of the Report, which, in the opinion of the Committee on Medical Care, necessitated any reconsideration of the Report.

Therefore, as authorized by the Committee on Medical Care at its meeting on November 6, 1947, I hereby recommend to the Maryland State Planning Commission the acceptance of the Report of the Hospital Survey Committee and its transmission to the State Department of Health and the Surgeon General of the United States Public Health Service.

Very truly yours,

MAURICE C. PINCOFFS, M.D., *Chairman*
Committee on Medical Care



MARYLAND STATE PLANNING COMMISSION

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Mr. Henry P. Irr, Chairman
Maryland State Planning Commission
104 Equitable Building
Baltimore 2, Maryland

September 19, 1947

Dear Mr. Irr:

The report of the Hospital Survey Committee, including the Hospital Survey and Plan for development of hospital facilities within the State of Maryland, is submitted herewith.

The survey was completed late in 1946 and its preliminary findings and recommendations were published as the Interim Report of the Committee.

On the basis of the findings of the survey, combined with geographic, economic, and other factors, a long-range plan was developed for the construction and distribution of facilities felt to be needed to bring the total of such facilities in line with the need in each of the fields of hospital service.

In its work the Committee used as a guide the stipulations of the Hill-Burton Bill (Public Law 725-79th Congress) and the regulations promulgated thereunder by the United States Public Health Service.

It is felt that the Plan fully complies with all Federal requirements and is in such form that it should receive the approval of the Surgeon General. Approval by the Surgeon General will qualify for aid from Federal funds such hospital construction done in accordance with the Plan up to the limits of such funds available.

Throughout the period of the work, we have had the assistance and cooperation of various State and private agencies. This assistance has been of great value and is appreciated.

The report does not purport to recommend solutions for all important problems. It is expected that further study and refinement of the plan will be made by the Department of Health and its Advisory Council on Hospital Construction, which is the agency responsible for the execution of the Plan. However, the Plan, as presented, does supply a program for development of the State and will have many other uses if it receives the careful attention of the various interests concerned.

Respectfully yours,

WALTER D. WISE, M.D., *Chairman*
Hospital Survey Committee

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FOREWORD

HEALTH consciousness, manifest as an active public interest in the personnel, services, and facilities available for the restoration and preservation of health, has grown remarkably since the turn of the century. Adequacy of health services and facilities and the means to make them available geographically and financially are now vital public issues.

With the development of medical practice from empiric tenets to a scientific art, the doctor's satchel and office equipment combined with his training and experience have ceased to be his total armamentarium. As his accessories, research and discovery have added therapeutic and diagnostic equipment, ranging from light globes the size of a grain of wheat to the million-volt X-ray apparatus and the electronic microscope. As a result, the scope of medical knowledge has grown so broad and the complexity of the equipment so great that specialists within the profession and expert technicians are now required.

This broadening of medical knowledge has caused the financial investment necessary to grow beyond the capacity of individual physicians. The hospital was the natural place for the installation of this equipment and the employment of the personnel needed for its effective use.

Prior to the introduction of diagnostic and therapeutic measures and equipment, the discovery of anesthesia had made surgery possible and the development of aseptic techniques had made it safe. The operating room with its equipment became a most important part of the hospital.

The hospital gradually advanced from its limited utility of offering only domiciliary care, for which the indigent were referred because of lack of home facilities. It ceased to be the place of last resort. Instead, it became the place of first resort for the care of the sick and injured. With patients available for clinical study and with equipment and trained personnel, staff research became an important function. The need for additional trained personnel made necessary programs for the training of doctors, nurses, and technicians, thus placing the hospital in the educational field.

The newly found medical skills have resulted in the discovery of many diseases and pathological conditions and the development of techniques for their treatment. Conditions formerly thought to be hopeless have been brought within the field of curable diseases. The duration of illness has been reduced. This factor has been offset by care of patients with conditions which formerly had gone unrecognized or had been considered incurable. The percentage of births in hospitals has increased significantly. It is expected that this trend will continue until practically all births occur within hospitals, provided hospital capacities keep pace with the increased demand.

As a result of the multiplicity of techniques necessary for treatment of the different types of patients, general hospitals have classified their service into departments, such as surgical, medical, obstetric, pediatric,

isolation, and others. Specialized hospitals have also been established for the care of limited types of patients, such as mental, tuberculosis, children, women, and those having diseases requiring isolation.

The investment in materials, buildings, and equipment and the accompanying payrolls for highly skilled personnel have created financial problems, mounting in direct proportion to the broadening of the field. The financial side of medical care now presents two distinct phases. Securing funds for the original investment in construction and equipment is the first. The continuing operation of the hospital, which now entails annual operating costs equivalent to approximately one third to one half of the capital investment, is the day-to-day problem.

Local and State subsidies and community funds have been established in order to make services available to all. During the last decade Blue Cross plans were developed as a means of budgeting for hospital needs. By this method, the large class of employed individuals were removed from the marginal group who were usually able to finance the ordinary costs of living but to whom medical expenses were frequently a financial catastrophe. These persons were formerly part of the group known as the *medically indigent*.

Motivated by a desire for the preservation of life and by the realization that means were known to approach this end, a universal demand has developed for the installation of hospital facilities within reasonable traveling distance of every home. Labor organizations have bargained with employers for the creation of funds to establish medical facilities and for the payment of services rendered their members and dependents. Some employers voluntarily have included health programs with the perquisites offered their employees. By these means much has been accomplished toward making hospital services physically and financially available to greater numbers.

Demand has in most communities exceeded the available facilities. Due to variations in community education in the use of hospitals and financial resources, the establishment of hospitals has not been uniform. Some communities have what would appear to be an adequacy, but in large areas there are serious deficiencies. The inequity of area facilities is generally paralleled by a similar maldistribution of doctors, nurses, and trained personnel.

The progress in hospital programs and the concomitant health consciousness have created a mounting demand for adequate facilities until it has become a nation-wide issue. A variety of legislation has been proposed to provide anything from isolated phases of medical care to broad programs intended to cover every need "from the cradle to the grave." Some of these have been enacted.

The Hill-Burton Bill, under which state and national surveys of hospital facilities are being conducted, was passed by Congress and signed by the President (see Appendix A, Public Law 725). Under the Law, Federal

FOREWORD—Continued

funds are provided to assist the States with the cost of surveying their medical facilities. Congress is also authorized to appropriate funds to be allocated to the States as grants toward the construction of needed facilities.

Health consciousness of the public, therefore, has culminated in the enactment of a Federal law which is intended to measure existing facilities against needs and to aid in providing the facilities necessary to correct the inequalities.

Acknowledgments

The Hospital Survey Committee is indebted to many individuals and private and government agencies for their valuable assistance. The following is a partial list of those to whom credit is due:

AMERICAN COLLEGE OF SURGEONS
AMERICAN HOSPITAL ASSOCIATION
AMERICAN MEDICAL ASSOCIATION
BALTIMORE ASSOCIATION OF COMMERCE
BALTIMORE CITY HEALTH DEPARTMENT

BOARD OF MENTAL HYGIENE
DR. W. ROSS CAMERON
DEPARTMENT OF LEGISLATIVE REFERENCE
DEPUTY STATE HEALTH OFFICERS
HOSPITAL ADMINISTRATORS
MARYLAND-DISTRICT OF COLUMBIA HOSPITAL ASSOCIATION
MARYLAND HOSPITAL SERVICE, INC.
MARYLAND STATE DEPARTMENT OF HEALTH
BUREAU OF MEDICAL SERVICES
BUREAU OF VITAL STATISTICS
MARYLAND STATE NURSES' ASSOCIATION
MARYLAND TUBERCULOSIS ASSOCIATION
SALES MANAGEMENT MAGAZINE
STATE BOARD OF NURSES' EXAMINERS
STATE ROADS COMMISSION
UNITED STATES BUREAU OF THE CENSUS
UNITED STATES PUBLIC HEALTH SERVICE

To those whose names are not included, the Committee extends its sincere thanks.

SUMMARY

THE charges under which the project was conducted were¹:

1. To survey existing institutional facilities for the care of the sick and for the rendering of public health service.
2. To analyze the facts governing the availability and use of these facilities.
3. To define the need for additional facilities.
4. To develop a long-range program whereby existing facilities and such additional facilities as are recommended may operate to provide a comprehensive and integrated hospital service for the citizens of Maryland.

Recommendations of the Commission on Hospital Care and the provisions of the proposed Hospital Survey and Construction Act were used as a guide and adapted to local conditions and thinking. Enactment of the Hospital Survey and Construction Act (Public Law 725 of the 79th Congress) was urged by many groups and became law on August 13, 1946.

The Law authorizes Federal funds to be made available equal to one third of the cost of the survey and planning program and one third of the cost of construction under the program. The allotment of survey and planning funds to states is based on population. Allotment of construction funds takes into consideration population and per capita income. Maryland's share of the funds for survey and planning is \$46,158, plus \$870,300 annually for a period of five years for construction. Grants are limited to governmental and nonprofit organizations.

Hospitals were grouped and studied under the following classifications:

1. General hospitals (*pp. 16-77*)
2. Tuberculosis hospitals (*pp. 78-85*)
3. Chronic disease hospitals (*pp. 86-90*)
4. Mental hospitals (*pp. 91-98*)
5. Public health facilities (*pp. 99-102*)

It is emphasized that these classifications are not at all independent of each other. Their services should be integrated and their physical structures closely related and, if possible, joined. The priority schedule was purposely designed to promote such integration.

General hospitals

General hospitals will become *general* in fact when they include departments for mental, tuberculosis, chronic, and convalescent patients and establish outpatient services in these fields.

Existing hospitals are reasonably well distributed, but at no point in the State is there an adequacy of beds (*Map 2, p. 19; Map 3, p. 27*).

¹*Interim Report of Committee on Medical Care, Maryland State Planning Commission, January 1947, pp. 19-38.*

Their utilization varies from 30.6% to 122.8% of capacity (*Table M, p. 18*). This factor was used in establishing the priority schedule.

General hospitals were treated on an area basis. Logical service areas for hospitals were established, taking into consideration population, geographic boundaries, transportation, and trade patterns. The areas range in size from single counties to the base area which includes Baltimore City and the five surrounding counties (*Map 1, p. 17*).

The areas were later consolidated into regions for the purpose of demonstrating where facilities could be found if they were not available locally (*Map 4, p. 76*).

General hospitals are conveniently located throughout the State, with the exception of four areas: Garrett, Carroll, Caroline, and Worcester counties. Projects are being actively planned by sponsoring groups in each of these areas.

Groups in Garrett and Worcester counties are planning general hospitals. In Caroline and Carroll counties, groups are planning public health centers. Worcester, Caroline, and Carroll counties are served by general hospitals in communities located at reasonable distances.

Many of the existing hospitals are utilizing structures, all or part of which could be justifiably recommended for replacement. Most of them need to expand their capacity to meet the existing need.

Few general hospitals conduct organized outpatient clinics, but practically all render diagnostic service to both inpatients and outpatients. While such programs are in a high state of development at a few hospitals, principally in Baltimore City, they are available to a limited extent throughout the State.

Educational programs in the form of postgraduate training for nurses and physicians, schools for student nurses, internes, and resident training are conducted in Baltimore City. Outside of Baltimore City, educational programs are largely limited to schools of nursing. In the field of medical education in general hospitals, all phases are covered at some point in the State, but there is again the problem of adequacy and distribution.

Research is carried on quite extensively in Baltimore City, but no general hospitals in the balance of the State are engaged in active formal research programs.

Tuberculosis hospitals

Maryland has made limited provisions for tuberculosis patients at its State-owned institutions. These are supplemented by nonprofit institutions.

Tuberculosis hospitals are not satisfactorily distributed geographically (*Map 5, p. 79*). Assignment of their beds by race is not in equitable ratio to existing needs.

Inadequacy of beds and improper geographic distribution is defeating educational programs in this field

and causing infected persons and their families to forego the benefits and protection of institutional care.

The need for additional facilities was based on a standard of 2.5 beds per tuberculosis death per year. The allocation of facilities was based on regions established in the study of general hospitals.

Changes in thinking with regard to tuberculosis facilities make it appear that the State-owned hospitals constructed in an earlier day are not altogether proper as to design and location. Until the time when new construction can be undertaken, the existing institutions will have to be utilized. When the increased capacity approaches the need, changes can be made, such as the elimination of open-air pavilions.

Clinics held in the counties and Baltimore City and the mass X-ray program being conducted in conjunction with the Maryland Tuberculosis Association are fulfilling to a degree the case-finding phase of the proposed program. Educational programs for the public are being conducted by the State Department of Health, the Health Department of the City of Baltimore, and the Maryland Tuberculosis Association.

Transfer of the State-owned institutions to the Department of Health is a step toward integration of the entire program under one State office and can be expected to bring about an improvement in the program in all its phases.

The greatest urgency in this field is related to the care of tuberculosis nonwhite persons.

Chronic disease hospitals

Official action on a State program in the field of chronic disease hospitals was taken only in recent years. The construction program is just getting underway with the first new institution at Deers Head, near Salisbury. An arrangement has been made for the use of buildings at Camp Ritchie as a temporary chronic disease hospital until the one planned for Hagerstown can be built.

Even though the chronic disease hospital program has not yet started to function, it is to the credit of the State that it has officially recognized the need and has taken concrete steps toward meeting it.

The projected State construction program should be expedited. Conditions existing in many nursing homes in which such patients are accepted are forceful testimony to the need.

Chronic disease hospitals must include departments for chronic, convalescent, and incurable patients. They must maintain an active program of rehabilitation, or otherwise they will become merely domiciliary institutions.

Grants to welfare clients should be supplemented in cases where a disabling illness exists, for the purpose of making possible the purchase of necessary services and medication.

Mental hospitals

Mental hospital capacities are seriously short of the need. Their geographic distribution is unsatisfactory (*Map 6, p. 92*).

They have grown to the point where further expansion is of doubtful advantage when weighed against a program for the construction of new facilities at new locations.

Psychiatric departments of general hospitals are an important need and have been given high priority for the purpose of encouraging their establishment.

The situation in the case of the acutely mentally ill is quite different from the tuberculous patients in that the condition is usually evident and the need for institutional care is imperative rather than optional.

As a result, the mental hospitals are crowded beyond their capacities in spite of the fact that personnel falls short of the needs of the normal capacity. The program enacted by the 1947 Legislature, authorizing construction of housing for personnel, is a proper step toward alleviating the unsatisfactory conditions. A construction program for the accommodation of more patients should be undertaken as early as possible.

The mental health program which will have the benefit of Federal subsidization will broaden the service in this branch of the work.

Public health facilities

Public health facilities under the organizational arrangement by which Baltimore City and each of the counties has its own health department is very satisfactory (*Map 7, p. 100*). The housing facilities for the centers are in most cases rented and unsatisfactory.

A program for the construction of public health centers is urged. Clinics operated outside of the centers usually require few specially designed facilities and can with some planning be adapted to rented places available.

Personnel

Every phase of the health program is impeded by shortage of personnel, both skilled and unskilled. The planned program of hospital construction will create an increased demand for all types of trained personnel.

Educational programs for the training of laboratory, X-ray, and other types of technicians are in effect, but the number of graduates is short of the need.

The same condition applies to the field of nursing. In recent years, many positions have been created for nurses in fields other than hospitals and bedside nursing. Industry, commercial aviation, government, and other employers have established positions with training in nursing as a basic qualification.

Because of the competition for the services of trained personnel, hospitals are faced with the conflict between meeting the higher salary costs and the limitations of the patients' ability to pay for the services.

The entire field of trained personnel is one which should be studied further for the purpose of increasing recruitments and training to meet the growing demands. The establishment of salaries should be based on the value of services rendered and the ability of the public to purchase such services.

Physicians

Study should be given to a program by which the services of specialists can be made routinely available for consultation with other physicians throughout the State. In line with the planned expansion of hospital facilities, it is important that formal action be taken to assure availability of competent professional persons.

Veterans' facilities

Federal-owned institutions were not included in the survey since these facilities are not available to the general public. However, with a significant number of residents qualifying for admission to such hospitals, the demand on other institutions is lessened. Conversely, competition for personnel is increased.

The Federal Government operates eight institutions in the State of Maryland:

Type of Hospital	Location	Bed Capacity
General	Aberdeen Proving Ground	12
General	Annapolis	275
General	Bainbridge	1,601
General	Baltimore	563
General	Fort Meade	113
General	Edgewood	56
General	Fort Howard	364
Mental	Perry Point	1,633

Priorities

The need for additional facilities in all categories is far in excess of the amount that can be provided for with the present allotment of Federal funds. Accordingly, considerable construction will have to be undertaken without the benefit of such assistance.

For the purpose of allocating the limited Federal funds available to the points of greatest need, a system of priorities was developed (*Table V, p. 103, and Table W, p. 108*). The method devised will encourage the establishment of facilities in the order of the degree

of public need for them. In determining the extent of need, such factors as population density and trends, geographic and racial distribution of population, per capita income and the ability of the community to support added facilities, transportation, industry, and commerce, were considered in relation to the existing hospital facilities.

Further study needed

This survey and the plan which it projects reveal the need for further study. They indicate not only the degree to which the problem of the care of the ill in Maryland has grown but also the discrepancy between existing facilities and present needs.

As the concept is reoriented from one of meeting local needs in specific fields to considering current and projected needs in all the categories of medical services, new problems become apparent. The need for correlation of programs between institutions and fields of service is paralleled by the need for planning in the education of nurses, physicians, and other technical personnel. Serious consideration should be given to the integration of medical services for the purpose of making specialized services broadly available.

These problems rest with the responsible authorities of the institutions and with the representatives of the various fields, working with the Committee on Medical Care of the State Planning Commission.

The Plan as projected fully complies with the requirements of the Hospital Survey and Construction Act (Public Law 725 of the 79th Congress) and, subject to the approval of the Surgeon General of the United States Public Health Service, should qualify the State of Maryland to receive Federal funds for hospital construction.¹

¹The Maryland State Plan was approved by the Surgeon General of the United States Public Health Service on March 26, 1948.

PART I

HOSPITAL SURVEY AND CONSTRUCTION PROGRAM¹

Chapter 1. HOSPITAL SURVEY AND CONSTRUCTION ACT

CONGRESS passed the Hill-Burton Bill, known as Senate Bill 191, or the Hospital Survey and Construction Act, as one of the last acts of the 2nd Session of the 79th Congress. President Truman signed it on August 13, 1946, and it became known as Public Law 725.

Under the Law, the work is divided into two phases, named in the title. The first phase is the survey and preparation of a plan. The second is the administration of the construction of facilities under the plan. The Law is written so that this work may be done as two separate efforts, or as one continuous project. It is required that a "single State agency" be responsible for the survey and planning and that a "single State agency" be responsible for the administration of construction. These may be the same or different agencies.

The present Hospital Survey Committee under its charge limited its work to the first phase of the Law and has completed its assignment with the preparation of the State Plan. Under legislation enacted by the 1947 Legislature, the State Board of Health is designated as the agency to administer the construction program.

Public Law 725 authorizes the appropriation of \$3,000,000 to be allotted to the States as grants to be expended for surveys, to the extent of one third of the total expenditures for such purposes by the individual States. It also authorizes the appropriation of \$75,000,000 annually for a period of five years for the construction of medical facilities. Grants for construction are applicable to projects which are within the scope of the approved State Plan and are based on one third of the total cost of such projects. Funds were appropriated for the survey; but, while authorized to be appropriated, no funds were appropriated for construction.

The funds to be appropriated will be allotted to the various States on the basis of a formula contained in the Law. On the basis of the formula, the State of Maryland is entitled to a sum of \$46,158 for survey purposes and an annual allotment of \$870,300 for a period of five years for construction.

If all of the funds available were utilized, it would be necessary that Maryland set up \$92,316 for survey purposes, making a total of \$138,474 available. Such sums were not necessary for the work of the present Committee. However, the State agency designated for the administration of the construction program probably will find it necessary to review the program from

time to time and no doubt will utilize some of this money.

If all of the Federal construction funds available are utilized and if these funds are limited to the amounts now stipulated in the Law, the construction program will entail expenditures of \$2,610,900 per year, or \$13,054,500 for the five-year period.

It is required that each State wishing to participate in this program make formal application for such part of the Federal funds allotted to it as it may need for carrying out the purposes of the Act. The State Planning Commission, on October 24, 1946, filed with the United States Public Health Service an application for \$4,991 based on an estimated total expenditure of \$14,973. The application was supported by such documents as were required to establish the statutory authority for the State Planning Commission to function as the "single State agency" for the making of the survey and the preparation of the State Plan. The application was approved by the Surgeon General of the United States Public Health Service.

Under the Law, certain bed maxima for the State are established in the various categories of medical facilities. Under the Regulations promulgated by the United States Public Health Service (Appendix B), hospital areas are defined and classified on the basis of population content. Graduated bed maxima are established for the various types of areas.

The State Plan is intended to determine the differential between existing facilities and those established as needed. As a part of this plan, these needs are established on a priority basis according to their urgency. The plan is designed for the integration of the various types of facilities between the areas so that adequate services will be established in or be available to every part of the State.

The completed plan will be submitted to the State Department of Health for the administration of grants for construction. Prior to initiating the program, the Department of Health will submit the plan to the Surgeon General of the United States Public Health Service for approval. It is expected the Department of Health will adopt the plan as presented. However, it has authority to modify the plan to meet changing conditions.

¹The information appearing in Chapters 1 through 4 was originally presented as part of the *Interim Report of Committee on Medical Care*, Maryland State Planning Commission, January 1947, pp. 19-38.

Chapter 2. HOSPITAL SURVEY COMMITTEE

ON November 2, 1945, the Executive Committee of the Committee on Medical Care of the State Planning Commission met to discuss the activities of the Commission on Hospital Care and the advisability of instituting a State-wide survey of hospital facilities. It was pointed out that the Commission had been established under the auspices of the American Hospital Association to stimulate state-wide hospital surveys, with the objective to make a complete survey of hospital and public health facilities in the United States.

The contents of Senate Bill 191, as then written, were discussed. Under the provisions of the Bill, funds would be made available to states for surveys and for hospital construction after completion of the survey and plans for the expansion of needed hospital and public health facilities.

A resolution was passed to the effect that the Executive Committee would advise the entire Committee on Medical Care of this development for the purpose of securing authority to form and appoint a Hospital Survey Committee.

Dr. Victor F. Cullen, Acting Chairman of the Committee on Medical Care, addressed a letter to this group, as follows:

In accordance with the responsibilities of the Committee on Medical Care of the Maryland State Planning Commission, "to keep under constant survey the problems of medical care for the citizens of this State, and to formulate recommendations for better utilization and for extension of existing facilities and for the institution of such new facilities as are required," and in view of the physical additions presently contemplated by many of our Maryland hospitals, the establishment of a Hospital Survey Committee has been considered imperative. The following persons have been selected as members of the Committee:

J. Douglas Colman	Huntington Williams, M.D.
W. D. Noble, M.D.	C. E. Wise, Jr.
George H. Preston, M.D.	Walter D. Wise, M.D.
Robert H. Riley, M.D.	Benjamin W. Wright
Winford H. Smith, M.D.	Peregrine E. Wroth, M.D.
Harvey B. Stone, M.D.	Ralph Young, M.D.

The Committee shall elect its own chairman.

Hospitals do not achieve their fullest usefulness if their interests are limited to their primary function of restoring to health those disabled by illness or injury. In addition, hospitals have opportunities to maintain and improve health; to provide educational opportunities and encouragement for the members of the medical, dental, nursing and allied professions; contribute to the advancements of science through research; and to serve more actively in the education of the public in matters pertaining to the maintaining of health. Therefore, the functions of the Committee are:

1. To survey existing institutional facilities for the care of the sick and for the rendering of public health service.
2. To analyze the facts governing the availability and use of these facilities.
3. To define the need for additional facilities.
4. To develop a long-range program whereby existing facilities and such additional facilities as are recommended may operate to provide a comprehensive and integrated hospital service for the citizens of Maryland.

In performing its function, the Committee should recognize the provisions of the several contemplated federal public works programs, under which, funds may be available for hospital construction. It is imperative that the work of this Committee should be pursued with all possible dispatch and

upon its completion, a report of its findings and recommendations presented to the Committee on Medical Care of the Maryland State Planning Commission. Any interim reports which may seem indicated will, of course, be welcomed.

Through the interests of Governor Herbert R. O'Connor, funds have been made available to the State Planning Commission, which should provide for the technical assistance necessary for the Committee effectively to perform its functions.

Dr. Walter D. Wise was unanimously elected Chairman of the Committee at a meeting held on February 22, 1946.

The Hospital Survey Committee, at the outset, recognized in its assignment three definable phases and several limiting factors. The initial phase would be the inventory of existing medical facilities. The second stage of the work would entail the compilation of the data thus gathered and an analysis of the recorded facilities quantitatively, qualitatively, geographically, and in relation to population trends. The third phase would consist of: establishing the actual need for the various types of facilities; determining the differential between existing facilities and those considered adequate to meet the need; and preparing a long-range plan for the construction of the facilities required to meet the established need, giving special consideration to the urgency of the need from the standpoint of type of service and location.

The limiting factors were funds and time.

The fund of \$8,500 made available by the Board of Public Works was sufficient for the employment of only a small staff and for the payment of only minimum incidental expenses.

The time element imposed a need for expeditious action. There was a generally recognized immediate need for additional medical facilities in all categories. The Hospital Survey and Construction Act, then pending in Congress, contained clauses stipulating that grants would be made for hospital construction, but required that a State Plan for such expansions must have been completed and approved by the Surgeon General before funds for construction could be released. The limited personnel which could be employed with the modest appropriation for this purpose would be required to work with dispatch to complete the work before the survey funds were exhausted.

At its meeting on April 16, 1946, the Survey Committee adopted a working program, as follows:

1. *Hospital Schedule of Information* to cover hospitals, and *Public Health Department Facilities Schedule of Information* to cover public health facilities, as prepared by the Commission on Hospital Care, will be used.
2. Schedules will be completed by the local health officers and hospital administrators.
3. The health officers will be requested to complete and return their schedules. The hospital administrators will be requested to hold their schedules until representatives of this Committee audit them.

4. One copy of the completed Schedules will be held for study and the other submitted to the Commission on Hospital Care for tabulation. The Commission will return this copy along with a set of punch cards when the tabulations are completed.
5. One copy of the Hospital Schedules will be returned to the administrators.
6. At the completion of the work, the files, including the Schedules, with the deletion of Section G, entitled "Financial Data," will be turned over to the State Department of Health.
7. Since the Bureau of Medical Services of the State Department of Health is seeking the same information as the basis for licensing medical institutions, cooperation will be accepted from and given to this Bureau.

To give the Committee broader representation and to have the benefit of their own thinking and the

thinking of the groups they represent, the following were nominated for membership on the Hospital Survey Committee:

Dr. Ernest L. Stebbins, Director of the School of Hygiene and Public Health of the Johns Hopkins University.

Mr. J. David Cordle, Secretary-Treasurer of the Brotherhood of Railway Clerks of the Baltimore and Ohio Railroad.

Mr. Edwin P. Young, Jr., City Editor of *The Evening Sun*.

These nominations were presented to the Committee on Medical Care for approval. On November 25, 1946, the Governor announced these appointments. Thus membership of the Committee was increased to sixteen, including Dr. Maurice C. Pincoffs, Chairman of the Committee on Medical Care.

PART II

THE FIELD SURVEY

Chapter 3. HOSPITALS, NURSING HOMES, AND PUBLIC HEALTH FACILITIES

THE field survey was undertaken for the purpose of compiling data as to the total number of medical institutions, including bed capacity and ancillary departments, and public health facilities available in the State.

The first work done was the compilation of a complete list of institutions in the State maintaining facilities for the care of bed patients. This was simplified by the fact that the Legislature had already enacted a hospital licensing law, Chapter 210, Acts of 1945 (Appendix F), and the Bureau of Medical Services of the State Department of Health had already compiled such a list. A copy of this list was made available to the Hospital Survey Committee.

Since the Bureau of Medical Services had planned to use for its basic files on the licensed institutions data similar to those required for the completion of the Schedules of Information, the survey work was complementary to the field work necessary for State licensing purposes. The Bureau of Medical Services, in line with its work of inspection prior to licensing hospitals, made its facilities and personnel available to assist with the survey work. The hospital consultant of the Bureau, at the time of inspecting institutions for licensing purposes, on numerous occasions completed the Hospital Schedule of Information for the survey. This cooperation was very valuable to the survey throughout the period of its field work.

Additions and deletions were made to the list as new institutions were found and others discontinued in

service. These changes were almost entirely in the category of nursing homes.

The original list, along with additions made during the period of the field work, included 231 institutions. Of those listed, 31 either had not followed through with their plans to open or had closed. The balance of 200 institutions were included in the survey.

Institutions owned and operated by the Federal Government were not considered by this survey even though they are an increasingly important part of the Nation's hospital service.

A tabulation of the institutions by type of ownership or control and by county is given in Table A.

Two copies of the Schedule of Information were mailed to every institution on the list. These Schedules contained forty pages of questions covering the following subjects:

- A. General data
- B. Area served
- C. Physical plant
- D. Patient service data
- E. Medical staff
- F. Administration
- G. Financial data
- H. Educational activities
- J. Research activities

The recipients of the Schedules were requested to complete them and keep them available pending the

TABLE A: INSTITUTIONS BY TYPE OF OWNERSHIP OR CONTROL AND BY COUNTY

COUNTY	GOVERNMENTAL ¹				NONGOVERNMENTAL			TOTALS
	State	City	County	City-County	Nonprofit		Proprietary	
					Church	Nonprofit		
Allegany	1	—	2	1	1	—	4	9
Anne Arundel	1	—	—	—	—	1	2	4
Baltimore	3	—	—	—	3	5	14	25
Calvert	—	—	—	—	—	1	—	1
Caroline	—	—	—	—	—	—	1	1
Carroll	2	—	—	—	1	—	4	7
Cecil	—	—	—	—	—	1	2	3
Charles	—	—	—	—	—	1	—	1
Dorchester	1	—	—	—	—	1	2	4
Frederick	1	—	2	—	—	3	2	8
Garrett	—	—	—	—	—	1	1	1
Harford	—	—	—	—	—	1	2	3
Howard	—	—	—	—	—	—	2	2
Kent	—	—	—	—	—	1	2	3
Montgomery	—	—	—	—	2	3	19	24
Prince George's	—	—	—	—	1	1	5	7
Queen Anne's	—	—	—	—	—	—	4	4
St. Mary's	—	—	—	—	—	1	—	1
Somerset	—	—	—	—	—	1	—	1
Talbot	—	—	—	—	—	2	3	5
Washington	—	—	1	—	2	2	4	9
Wicomico	1	—	—	—	—	2	2	5
Worcester	—	—	—	—	—	—	—	—
County totals	10	—	5	1	10	27	75	128
Baltimore City	1	2	—	—	16	21	32	72
STATE TOTALS	11	2	5	1	26	48	107	200

¹Federal institutions not included.

visit of a field worker. Because of the comprehensiveness of the questionnaire and the recognized difficulty in preparing the statistics required for its completion at a time when most medical institutions were very busy and experiencing personnel shortages, a period of thirty days was allowed between the mailing of the Schedule and the visit of the field worker.

Preceding the mailing of the Schedules, a letter was sent by Dr. Merrill L. Stout, Director of the Hospital for the Women of Maryland, who was President of the Maryland-District of Columbia Hospital Association. This letter portrayed the survey as something apart from the usual questionnaire, received in such abundance by hospital administrators.

Accompanying each Hospital Schedule was a letter from Dr. Walter D. Wise, Chairman of the Hospital Survey Committee, requesting that the information be entered promptly in preparation for the later visit by the field worker.

Visits were made to the 200 institutions and to some of those which were later deleted from the list when they were found to have discontinued their work.

The administrators of the institutions, with few exceptions, were willing to cooperate with the survey effort but were universally seriously handicapped by a number of operational problems.

Few Schedules were completed at the time of the

field worker's first visit. In some cases, even though notice had been sent of the planned visit, a single entry had not been made prior to the arrival of the field worker.

Some Schedules, especially in the cases of nursing homes, were completed by the field worker from the meager records available. In the larger institutions, where considerable time was required to prepare the statistical data, the administrator was assisted with the factual data and urged to complete the balance of the work by the time of a later visit. Many institutions had to be visited more than once and, in some cases, as many as four visits were necessary before the Schedule was completed and ready for audit.

Public Health Department Facilities Schedules of Information were sent to the health officers in each of the counties and Baltimore City. Dr. Robert H. Riley, Director of the State Department of Health, and Dr. Huntington Williams, Commissioner of Health of Baltimore City, urged their respective staffs to complete and return these Schedules promptly.

The responsible persons performed this duty and returned the Schedules completed, with the result that this phase of the survey was completed with a minimum of effort on the part of the survey staff.

The field work was started in April 1946, and completed in October of the same year.

Chapter 4. CLASSIFICATION OF INSTITUTIONS

THE Hospital Survey and Construction Act was intended to include general, tuberculosis, chronic disease, and mental hospitals. Because of the State chronic disease hospital program, the survey included, in addition, nursing homes, homes for the aged, and other special institutions. This was done for the purpose of gathering data on the number of patients being cared for in places other than their homes, and for estimating the potential load which would fall on institutions of the various types once they became available.

Owing to the inclusive nature of the survey, it was necessary to group the types of institutions under twelve headings. The original grouping included the following categories of hospitals:

1. General
2. Nervous and Mental
3. Tuberculosis
4. Contagious
5. Obstetric
6. Pediatric
7. Orthopedic
8. Eye, Ear, Nose, and Throat
9. Convalescent
10. Skin and Cancer
11. Chronic Disease
12. Others, Including Aged

In Table B the institutions are shown by type of service and county.

The institutions were requested to report their bed complement, that is, the number of beds actually set

up and in use for inpatients, excluding bassinets for newborn infants. They were also asked to report their normal bed capacity, that is, the number of beds for which the institution was designed or, in lieu of this information, the number of beds which could be set up allowing 80 square feet of floor space per bed. A positive differential between the bed complement and the normal bed capacity indicates the expansion of capacity, or crowding, which the institution permitted without adding space for beds. The original tabulation of the bed complement by county, by type of institution, and racial assignment is shown in Table C.

For this tabulation, the institutions were grouped under the four main headings referred to in the Hospital Survey and Construction Act, that is, general, tuberculosis, chronic disease, and mental hospitals. The Act specifically excludes institutions giving only domiciliary care.

General hospitals included those institutions offering medical care, surgery, and obstetrics. Hospitals admitting patients having conditions which fall in the category known as the specialties were grouped separately, but later included with general hospitals. In this group were contagious disease, obstetric, pediatric, orthopedic, and eye, ear, nose, and throat hospitals. Tuberculosis hospitals included those institutions where admissions are limited to patients having tuberculosis. One hundred beds maintained at Springfield State Hospital for the care of mental patients having tuberculosis were counted as beds for mental patients.

TABLE B: INSTITUTIONS BY TYPE OF SERVICE AND COUNTY

COUNTY	GENERAL	NERVOUS AND MENTAL	TUBERCULOSIS	CONTAGIOUS	OBSTETRIC	PEDIATRIC	ORTHOPEDIC	EYE, EAR, NOSE, AND THROAT	CONVALESCENT	SKIN AND CANCER	CHRONIC	OTHERS, INCLUDING AGED	TOTALS
Allegany	3	1	—	—	1	—	—	1	—	—	3	—	9
Anne Arundel	1	1	—	—	1	—	—	—	—	—	1	—	4
Baltimore	—	9	3	—	—	—	—	—	5	—	5	3	25
Calvert	1	—	—	—	—	—	—	—	—	—	—	—	1
Caroline	—	—	—	—	1	—	—	—	—	—	—	—	1
Carroll	—	1	1	—	—	—	—	—	2	—	—	3	7
Cecil	1	—	—	—	1	—	—	—	—	—	1	—	3
Charles	1	—	—	—	—	—	—	—	—	—	—	—	1
Dorchester	1	1	—	—	—	—	—	—	—	—	—	—	4
Frederick	3	1	1	—	—	—	—	—	—	—	—	3	8
Garrett	—	—	—	—	—	—	—	—	—	—	1	—	1
Harford	2	—	—	—	—	—	—	—	1	—	—	—	3
Howard	—	2	—	—	—	—	—	—	—	—	—	—	2
Kent	1	—	—	—	—	—	—	—	—	—	—	—	3
Montgomery	3	2	—	—	—	—	—	—	12	—	7	—	24
Prince George's	3	2	—	—	—	—	—	—	—	—	—	—	7
Queen Anne's	—	—	—	—	—	—	—	—	—	—	4	—	4
St. Mary's	1	—	—	—	—	—	—	—	—	—	—	—	1
Somerset	1	—	—	—	—	—	—	—	—	—	—	—	1
Talbot	1	—	—	—	2	—	—	—	—	—	—	—	5
Washington	1	—	—	—	1	—	—	1	2	—	3	1	9
Wicomico	1	—	1	—	—	—	—	—	2	—	—	1	5
Worcester	—	—	—	—	—	—	—	—	—	—	—	—	—
County totals	25	20	6	—	7	—	—	2	24	—	27	17	123
Baltimore City	18	2	—	1	1	—	2	2	16	1	23	6	72
STATE TOTALS	43	22	6	1	8	—	2	4	40	1	50	23	200

TABLE C: BED COMPLEMENT BY COUNTY, TYPE OF INSTITUTION, AND RACIAL ASSIGNMENT

COUNTY	GENERAL		NERVOUS AND MENTAL		TUBERCULOSIS		CONTAGIOUS		OBSTETRIC		PEDIATRIC		ORTHOPEDIC		EYE, EAR, NOSE, AND THROAT		CONVALESCENT		SKIN AND CANCER		CHRONIC		OTHERS, INCLUDING AGED		TOTALS BY RACE		TOTALS	
	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW		
Allegany	391	2	96	—	—	—	—	—	6	—	—	—	—	—	17	—	—	—	—	—	—	48	—	—	558	2	560	
Anne Arundel	70	—	—	1,234	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	—	—	79	1,237	1,316	
Baltimore	—	—	4,112	—	453	11	—	—	—	—	—	—	—	—	—	—	126	—	—	—	—	89	—	182	4,962	11	4,973	
Calvert	15	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	11	26	
Caroline	—	—	—	—	—	—	—	—	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	8	
Carroll	—	—	3,011	—	—	357	—	—	—	—	—	—	—	—	—	—	11	—	—	—	—	—	37	—	3,059	357	3,416	
Cecil	62	10	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	—	13	—	—	—	79	10	89	
Charles	23	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23	8	31	
Dorchester	57	18	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	—	571	18	589	
Frederick	175	33	30	—	523	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	234	22	962	55	1,017		
Garrett	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	—	24	
Harford	78	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	98	11	109	
Howard	—	—	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51	—	51	
Kent	25	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	—	—	—	38	6	44	
Montgomery	323	20	100	—	—	—	—	—	—	—	—	—	—	—	—	—	141	—	—	—	141	—	—	—	705	20	725	
Prince George's	206	—	97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	114	—	417	—	417	
Queen Anne's	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31	—	31	
St. Mary's	35	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	10	45	
Somerset	30	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	8	38	
Talbot	83	25	—	—	—	—	—	—	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	117	31	148	
Washington	185	—	—	—	—	—	—	—	4	—	—	—	—	—	26	—	54	—	—	—	—	54	—	—	345	—	345	
Wicomico	147	30	—	—	60	—	—	—	—	—	—	—	—	—	—	39	—	—	—	—	—	—	—	64	—	310	30	340
Worcester	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
County totals	1,905	192	7,989	1,234	1,036	368	—	—	39	9	—	—	—	—	43	—	391	—	—	—	422	—	701	22	12,517	1,825	14,342	
Baltimore City	5,730	514	425	—	—	—	100	—	8	—	—	—	172	47	79	26	343	—	21	—	884	18	566	32	8,328	637	8,965	
STATE TOTALS	7,635	706	8,414	1,234	1,036	368	100	—	38	9	—	—	172	47	122	26	734	—	21	—	1,306	18	1,267	54	20,845	2,462	23,307	

Chronic disease hospitals included nursing homes, institutions for the care of convalescent patients, chronics, incurables, and aged. Mental hospitals included primarily those established for the diagnosis and treatment of the mentally ill.

The inclusive totals under the four broad headings, plus special institutions combined, are shown in Table D.

More detailed analyses of the institutions and their constituent departments were made to determine which institutions should be excluded from the survey and which categories would be credited with certain groups of beds.

TABLE D: BED COMPLEMENT OF INSTITUTIONS REGROUPED ACCORDING TO BROAD CLASSIFICATION

TYPE OF INSTITUTION	NUMBER OF INSTITUTIONS	BED COMPLEMENT
General hospitals	43	8,341
Tuberculosis hospitals	6 ¹	1,404 ²
Chronic disease hospitals	114 ¹	3,400 ²
Including institutions limiting admissions to:		
Chronics and convalescents	90	
Aged and others	24	
Mental hospitals	22 ¹	9,648 ²
Including institutions limiting admissions to:		
Epileptics		
Feebleminded		
Mental		
Special hospitals	15	514
Including institutions limiting admissions to:		
Contagious	1	
Obstetric	8	
Orthopedic	2	
Eye, ear, nose, and throat	4	
TOTALS	200	23,307

¹Not including departments of general hospitals.²Including bed complements of departments of general hospitals.

During the period of the survey, Dr. Schnauffer's Hospital at Brunswick in Frederick County closed.

The Johns Hopkins Hospital included in its total 87 beds in the Phipps Psychiatric Clinic, which were credited to the mental hospital bed total.

The Baltimore City Hospitals included 280 beds for tuberculous patients, 451 beds for chronics, and 705 beds for ambulatory aged, which were removed from the general hospital bed total.

There were no deletions from the number of beds available for tuberculous patients; however, the beds for tuberculous patients at the Baltimore City Hospitals were added.

The groups included in the category giving care to chronics, convalescents, and others including aged ranged from institutions bordering on the luxurious to places operated under conditions not fit for human habitation. At this point, institutions caring for aged persons and those giving only domiciliary care were excluded. In the final analysis this group was sharply discounted because few were found to offer more than domiciliary care.

Rosewood State Training School for Feebleminded was removed from the category of mental hospitals. Also excluded were the Bowditch Hospital School and the Silver Cross Home, both institutions for epileptics, and the Marine Home for Retarded Children.

The results of this reclassification of institutions and departments within institutions and after certain exclusions are shown in Table E. The normal bed capacities, determined from the reports, are also shown in Table E.

TABLE E: BED COMPLEMENT AND NORMAL BED CAPACITY OF INSTITUTIONS AFTER RECLASSIFICATION AND EXCLUSIONS

TYPE OF INSTITUTION	NUMBER OF INSTITUTIONS	BED COMPLEMENT	NORMAL BED CAPACITY	STANDARD UNDER PUBLIC LAW 725 ¹	DIFFERENTIAL BETWEEN NORMAL AND STANDARD IN PUBLIC LAW 725
General.....	42	6,874	6,566	8,923	-2,357
Tuberculosis....	6 ²	1,684 ³	1,883 ³	3,177	-1,294
Chronic.....	90 ²	2,391 ³	2,391 ³	3,966	-1,575
Mental.....	18 ²	8,292 ³	7,453 ³	9,915	-2,462
Special.....	7	300	300	—	300
TOTALS.....	163	19,541	18,593	25,981	-7,388

¹Based on population of 1,982,947, United States Bureau of the Census, Estimated Civilian Population, 1943. The population total used in the final analysis was 2,017,917, United States Bureau of the Census, Estimated Civilian Population, 1945.

²Not including departments of general hospitals.

³Including bed complements of departments of general hospitals.

An analysis of normal bed capacity by type of ownership, type of hospital, and racial assignment is given in Table F.

Having established the net normal bed capacities, comparisons were made with the maximum for each

category as set up in the Hospital Survey and Construction Act. The standards in Public Law 725 are as follows:

General hospital beds.....4.5 per 1,000 population
Tuberculosis hospital beds.....2.5 times the average annual deaths from tuberculosis in the State for the five-year period from 1940 to 1944.¹

Chronic disease hospital beds.....2.0 per 1,000 population
Mental hospital beds.....5.0 per 1,000 population

The standards in each of the categories were compared with the existing normal bed capacities in Table E. It was found that the over-all shortage of beds in all categories, when compared with the standards set up in Public Law 725, was 7,388. Detailed tabulations for each of the categories are shown in Tables G, H, I, J, and K.

During the later study of the individual institutions, deletions for unsuitable construction and other reasons were made, with the result that the acceptable bed total was reduced and the number of beds needed increased to 9,208.

¹Deaths from tuberculosis in Maryland for this period were: 1940, 1,302; 1941, 1,256; 1942, 1,263; 1943, 1,250; 1944, 1,285.

TABLE F: NORMAL BED CAPACITY BY COUNTY, TYPE OF OWNERSHIP, TYPE OF INSTITUTION, AND RACIAL ASSIGNMENT

COUNTY	GENERAL						TUBERCULOSIS			CHRONIC			MENTAL			SPECI L		
	State		County ¹ and/or City ²		Voluntary		State	County ¹ and/or City ²	Voluntary	County ¹ and/or City ²	Voluntary	Proprietary	State	County ¹ and/or City ²	Voluntary	Proprietary	Voluntary	Proprietary
	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW	W	NW
Allegany.....	49	2 218 ^{1/2}	a	124	12	—	—	—	—	—	—	15	—	52 ¹	a	—	—	17
Anne Arundel.....	—	—	—	58	12	—	—	—	—	—	—	9	—	—	—	—	—	—
Baltimore.....	—	—	—	—	—	—	199	11	254	—	—	206	2,013	—	99	—	—	—
Calvert.....	—	—	—	15	11	—	—	—	—	—	—	—	—	—	—	—	—	—
Caroline.....	—	—	—	—	—	—	—	538	—	—	—	21	2,688	—	—	—	—	—
Carroll.....	—	—	—	62	10	—	—	—	—	—	—	13	—	—	—	—	—	—
Cecil.....	—	—	—	25	8	—	—	—	—	—	—	3	466	—	—	—	—	—
Dorchester.....	—	—	—	47	18	—	—	—	—	—	—	24	—	—	—	—	—	—
Frederick.....	—	33 ¹	22 ¹	100	11	—	523	—	—	—	—	20	—	—	55	—	—	—
Garrett.....	—	—	—	61	11	17	—	—	—	—	—	24	—	—	—	—	—	—
Howard.....	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—
Kent.....	—	—	—	25	b	—	—	—	—	—	—	13	—	—	51	—	—	—
Montgomery.....	—	—	—	310	26	—	—	—	—	—	—	195	—	—	100	—	—	—
Prince George's.....	—	102 ¹	a	—	—	104	—	—	—	—	—	31	—	—	85	—	—	—
Queen Anne's.....	—	—	—	35	10	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Mary's.....	—	—	—	30	8	—	—	—	—	—	—	—	—	—	—	—	—	—
Somerset.....	—	—	—	67	20	—	—	—	—	—	—	—	—	—	—	—	—	—
Talbot.....	—	—	—	132	10	—	—	—	—	—	—	14	—	—	—	—	—	—
Washington.....	—	—	—	147	30	—	78	—	—	—	—	39	—	—	—	—	—	26
Wicomico.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worcester.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
County totals.....	49	2 353	22	1 238	179	121	800	549	254	—	14	682	5,167	52	a 238	390	—	43
Baltimore City.....	354	81 100 ²	a	3 650	417	—	—	—	140 ² 140 ²	451 ²	610	634	—	—	483	79	216	41
STATE TOTALS.....	403	83 453	22	4 888	596	121	800	549	140	451	624	1 316	5,167	52	a 721	469	216	41
TOTALS FOR WHITE PATIENTS.....				5,865					1,194		2,391				6,409			259
TOTALS FOR NON-WHITE PATIENTS.....				701					689		—				1,044			41
TOTALS.....				6,566					1,883		2,391				7,453			300

aSix extra beds set up for nonwhite patients.

bNo racial assignment.

TABLE G: GENERAL HOSPITALS, BED COMPLEMENT AND NORMAL BED CAPACITY BY RACIAL ASSIGNMENT

NAME OF INSTITUTION	LOCATION	BED COMPLEMENT			NORMAL BED CAPACITY		
		White	Nonwhite	Total	White	Nonwhite	Total
Allegany Hospital	<i>Allegany County</i>	124	<i>a</i>	124	124	<i>a</i>	124
Memorial Hospital	Cumberland	218	<i>a</i>	218	218	<i>a</i>	218
Miners Hospital	Frostburg	49	2	51	49	2	51
Annapolis Emergency Hospital	<i>Anne Arundel County</i>						
	Annapolis	58	12	70	58	12	70
Calvert County Hospital	<i>Calvert County</i>						
	Prince Frederick	15	11	26	15	11	26
Union Hospital	<i>Cecil County</i>						
	Elkton	62	10	72	62	10	72
Physicians Memorial Hospital	<i>Charles County</i>						
	La Plata	23	8	31	25	8	33
Cambridge-Maryland Hospital	<i>Dorchester County</i>						
	Cambridge	57	18	75	47	18	65
Frederick City Hospital	<i>Frederick County</i>						
Frederick County Emergency Hospital	Frederick	114	11	125	100	11	111
	Frederick	31	22	53	33	22	55
Fountain Green Hospital	<i>Harford County</i>						
Harford Memorial Hospital	Bel Air	17	—	17	17	—	17
	Havre de Grace	61	11	72	61	11	72
Kent and Queen Anne's General Hospital	<i>Kent County</i>						
	Chestertown	25	6	31	25	—	25
Montgomery County General Hospital	<i>Montgomery County</i>						
Suburban Hospital	Olney	30	10	40	30	10	40
Washington Sanitarium and Hospital	Bethesda	92	10	102	92	10	102
	Takoma Park	201	—	201	188	—	188
Eugene Leland Memorial Hospital	<i>Prince George's County</i>						
Prince George's General Hospital	Riverdale	87	<i>b</i>	87	87	<i>b</i>	87
Warren Hospital	Cheverly	102	<i>b</i>	102	102	<i>b</i>	102
	Laurel	17	—	17	17	—	17
St. Mary's Hospital	<i>St. Mary's County</i>						
	Leonardtown	35	10	45	35	10	45
Edward W. McCready Memorial Hospital	<i>Somerset County</i>						
	Crisfield	30	8	38	30	8	38
Easton Memorial Hospital	<i>Talbot County</i>						
	Easton	83	25	108	67	20	87
Washington County Hospital	<i>Washington County</i>						
	Hagerstown	175	10	185	132	10	142
Peninsula General Hospital	<i>Wicomico County</i>						
	Salisbury	147	30	177	147	30	177
County totals		1,853	214	2,067	1,761	203	1,964
Baltimore City Hospitals	<i>Baltimore City</i>						
Bon Secours Hospital	4940 Eastern Avenue	513	<i>a</i>	513	513	<i>a</i>	513
Church Home and Hospital	2025 West Fayette Street	142	—	142	142	—	142
	Broadway and Fairmount Avenue	165	—	165	165	—	165
Franklin Square Hospital	110 N. Calhoun Street	177	25	202	158	15	173
Hospital for Women of Maryland	Lafayette Avenue and John Street	124	—	124	124	—	124
Johns Hopkins Hospital	Broadway and Monument Street	767	217	984	656	217	873
Maryland General Hospital	Linden Avenue and Madison Street	233	9	242	228	7	235
Mercy Hospital	Calvert and Saratoga Streets	262	25	287	256	25	281
Provident Hospital	1514 Division Street	—	125	125	—	125	125
St. Agnes Hospital	Wilkins and Caton Avenues	221	—	221	184	—	184
St. Joseph's Hospital	1400 North Caroline Street	230	20	250	230	20	250
Sinai Hospital	1714 East Monument Street	300	—	300	300	—	300
South Baltimore General Hospital	1211 Light Street	138	12	150	127	8	135
Sydenham Hospital	Harford Road and Herring Run	100	<i>a</i>	100	100	<i>a</i>	100
Union Memorial Hospital	33rd and Calvert Streets	341	—	341	341	—	341
Volunteers of America Hospital	418 West Lexington Street	40	—	40	40	—	40
West Baltimore General Hospital	Rayner Avenue and Dukeland Street	186	<i>b</i>	186	186	<i>b</i>	186
University Hospital	Redwood and Greene Streets	354	81	435	354	81	435
Baltimore City totals		4,293	514	4,807	4,104	498	4,602
STATE TOTALS		6,146	728	6,874	5,865	701	6,566

*a*Nonwhite patients admitted.*b*Nonwhite patients admitted on emergency.

TABLE H: TUBERCULOSIS HOSPITALS, BED COMPLEMENT AND NORMAL BED CAPACITY BY RACIAL ASSIGNMENT

NAME OF INSTITUTION	LOCATION	BED COMPLEMENT			NORMAL BED CAPACITY		
		White	Nonwhite	Total	White	Nonwhite	Total
Eudowood Sanatorium.....	Baltimore County	194	—	194	194	—	194
Maryland Tuberculosis Sanatorium.....	Towson.....	199	11	210	199	11	210
Mt. Pleasant Hospital.....	Mt. Wilson.....	60	—	60	60	—	60
Maryland Tuberculosis Sanatorium.....	Reisterstown.....	—	—	—	—	—	—
Maryland Tuberculosis Sanatorium.....	Carroll County	—	357	357	—	538	538
Maryland Tuberculosis Sanatorium.....	Henryton.....	—	—	—	—	—	—
Maryland Tuberculosis Sanatorium.....	Frederick County	523	—	523	523	—	523
Maryland Tuberculosis Sanatorium.....	Sabillasville.....	—	—	—	—	—	—
Maryland Tuberculosis Sanatorium.....	Wicom co County	60	—	60	78	—	78
County totals.....	Salisbury.....	1,036	368	1,404	1,054	549	1,603
Baltimore City Hospitals, Department.....	Baltimore City	140	140	280	140	140	280
Baltimore City totals.....	4940 Eastern Avenue.....	140	140	280	140	140	280
STATE TOTALS.....	1,176	508	1,684	1,194	689	1,883

TABLE 1: NURSING HOMES AND INSTITUTIONS FOR CHRONICS, BED COMPLEMENT

NAME OF INSTITUTION	LOCATION	BED COMPLEMENT	NAME OF INSTITUTION	LOCATION	BED COMPLEMENT
NURSING HOMES					
Collins Nursing Home	<i>Allegany County</i> Cumberland	6	The Lemon Home	<i>Wicomico County</i> Salisbury	15
Crump Convalescent Home	Cumberland	9	Sallie Wright Nursing Home for Welfare Patients	Salisbury	24
Forest Avenue Nursing Home	<i>Anne Arundel County</i> Dorsey	9	County total		658
Bonny View Nursing Home	<i>Baltimore County</i> Catonsville	5	Alberta Convalescent Home	<i>Baltimore City</i> 4013 Liberty Heights Avenue	14
Coale's Nursing Home	Catonsville	14	Anderson Rest and Convalescent Home	3605 Hillsdale Road	22
Catonsville Home for Aged	Catonsville	25	Asburton House	3520 North Hilton Road	35
Mrs. Jane Hitchcock	Catonsville	6	Beech Hill	6028 Old Harford Road	12
Hoods Convalescent Home	Catonsville	57	Clifton Nursing Home	3502 Clifton Avenue	8
House in the Pines Nursing Home	16 Fusting Avenue	26	Cold Spring Home for Aged	2101 West Cold Spring Lane	55
Katherine Robb Nursing Home	Pikesville	13	Colonial Nursing and Convalescent Home	4506 Frederick Avenue	9
Yienger Nursing Home	Harri-onville	7	Crawford Retreat	2117 Denison Street	21
Armacost Nursing Home	Stoneleigh	29	Edgewood Nursing Home	6000 Bellona Avenue	55
Fringer Nursing Home	<i>Carroll County</i> Westminster	5	Elmhurst Nursing Home	1708 Eutaw Place	34
Hale Home for the Aged	Finksburg	5	Feinblatt Nursing Home	1701 Ellamont Street	17
Mumford Home	Westminster	5	Finley Nursing Home	2601 Roslyn Avenue	16
Rowe Nursing Home	Union Bridge	6	Garrison Nursing Home	2803 Garrison Boulevard	10
Harmony Nursing Home	<i>Cecil County</i> Conowingo	13	Harford Convalescent Home	4700 Harford Road	47
Mrs. Katie Tregoe's Home	<i>Dorchester County</i> Cambridge	3	Haven Nursing Home	4514 Garrison Boulevard	16
Kiser Nursing Home	<i>Garrett County</i> Mountain Lake Park	24	Home of Our Lady	1302 West Lexington Street	18
Harford Convalescent Home	<i>Harford County</i> Bel Air	20	Jewish Convalescent Home Society	4601 Pall Mall Road	11
Crew Convalescent Home	<i>Kent County</i> Chestertown	7	Parkmont Nursing Home	4212 Parkmont Avenue	10
Mrs. Ida King	Millington	6	Pine Ridge Convalescent Home	4703 Hampnett Avenue	19
Christ Child Convalescent Farm	<i>Montgomery County</i> Rockville	27	Eleanor Shipley	4112 Edmondson Avenue	5
Cur Lu Rest Home	Takoma Park	8	The Wayne	3203 Brightwood Avenue	5
Mrs. Elizabeth Gaitber	Gaitersburg	5	Twilight Rest and Nursing Home	1913 Eutaw Place	14
George Convalescent and Rest Home	Takoma Park	14	Opitz Home for Aged and Invalids	Edmondson Avenue and Nunnery Lane	41
Jolliffe Nursing Home for Aged	Silver Spring	14	Mrs. Mabel Harry	625 St. Johns Road	4
Mrs. Jolliffe	Takoma Park	17	Miss Margaret Judge	132 West Lafayette Avenue	8
Mrs. Lillie B. Melton	Silver Spring	12	Agnes McKenna Memorial Clinic	212 Stony Run Lane	21
Oak Drive Nursing Home	Silver Spring	8	The Misses Gaddis	218 Ridgewood Road	11
Resthaven Convalescent Home	Takoma Park	5	Mt. Carmel Nursing Home	2476 Shirley Avenue	22
Mrs. Louis Moody	Takoma Park	6	Ventnor Lodge	526 South Chapelgate Lane	23
Sandridge Rest Home	Rockville	10	Mrs. Virginia Lewis	4203 Springdale Avenue	4
Sinclair Convalescent Home	Kensington	5	Wheeler Nursing Home	1700 Park Avenue	15
Spring Villa Convalescent Home	Takoma Park	13	Baltimore City total		602
Waverly Sanitarium	Rockville	24	STATE TOTAL, NURSING HOMES		1,260
Witzke Nursing Home	Takoma Park	4	INSTITUTIONS FOR CHRONICS		
Woodlawn Sanatorium	Rockville	13	Mercy Villa Nursing Home	<i>Baltimore County</i> Bellona Avenue, Govans	24
Mrs. Olive Wright	Takoma Park	5	St. Gabriel's Home for Convalescent Girls	Catonsville	24
Youngerman's Nursing Home	Rockville	5	Infant and Child Health Center, Inc.	<i>Washington County</i> Hagerstown	14
Mother Jones Rest Home	<i>Prince George's County</i> Hyattsville	31	County total		62
Mrs. Legg's Home for Welfare Patients	<i>Queen Anne's County</i> Millington	6	Baltimore City Hospitals, Department	<i>Baltimore City</i> 4940 Eastern Avenue	451
Melvin Nursing Home	Millington	3	James Lawrence Kernan Hospital	Windsor Mill Road	89
Palmatory Nursing Home	Millington	10	Happy Hills Convalescent Home for Children	1708 West Rogers Avenue	68
Robbins Rest Home	Millington	12	Home for Incurables	700 West 40th Street	166
Eshlman's Nursing Home	<i>Washington County</i> Maugansville	4	Levindale Hebrew Home and Infirmary	Belvedere and Greenspring Avenues	175
Gateway Nursing Home	Route 40	18	Jenkins Memorial, Inc.	1000 Caton Avenue	88
Hillcrest	Hagerstown	40	Aged Women's and Aged Men's Home	1400 West Lexington Street	32
			Baltimore City total		1,069
			STATE TOTAL, INSTITUTIONS FOR CHRONICS		1,131
			STATE TOTAL		2,391

TABLE J: MENTAL HOSPITALS, BED COMPLEMENT AND NORMAL BED CAPACITY BY RACIAL ASSIGNMENT

NAME OF INSTITUTION	LOCATION	BED COMPLEMENT			NORMAL BED CAPACITY		
		White	Nonwhite	Total	White	Nonwhite	Total
Sylvan Retreat.....	<i>Allegany County</i> Cumberland.....	96	a	96	52	a	52
Crownsville State Hospital.....	<i>Anne Arundel County</i> Crownsville.....	—	1,234	1,234 ¹	—	1,044	1,044 ¹
Aigburth Manor.....	<i>Baltimore County</i> Towson.....	22	—	22	22	—	22
Haarlem Lodge.....	Catonsville.....	69	—	69	42	—	42
Relay Sanatorium.....	Relay.....	35	—	35	35	—	35
Sheppard and Enoch Pratt Hospital.....	Towson.....	300	—	300	238	—	238
Spring Grove State Hospital.....	Catonsville.....	2,214	—	2,214	2,013	—	2,013
Springfield State Hospital.....	<i>Carroll County</i> Sykesville.....	3,011	—	3,011	2,688	—	2,688
Eastern Shore State Hospital.....	<i>Dorchester County</i> Cambridge.....	492	—	492	466	—	466
Riggs Cottage Sanatorium.....	<i>Frederick County</i> Ijamsville.....	30	—	30	55	—	55
Pinel Clinic.....	<i>Howard County</i> Ellicott City.....	33	—	33	33	—	33
Elkridge Farm.....	Ellicott City.....	18	—	18	18	—	18
Cedarcroft Sanatorium.....	<i>Montgomery County</i> Silver Spring.....	50	—	50	50	—	50
Chestnut Lodge Sanatorium.....	Rockville.....	50	—	50	50	—	50
Laurel Sanatorium.....	<i>Prince George's County</i> Laurel.....	85	—	85	85	—	85
County totals.....		6,505	1,234	7,739	5,847	1,044	6,891
Gundry Sanatorium.....	<i>Baltimore City</i> Athol and Frederick Road.....	41	—	41	51	—	51
The Seton Institute.....	6420 Reisterstown Road.....	396	—	396	396	—	396
Phipps Psychiatric Clinic (Johns Hopkins Hospital).....	Broadway and Monument Street.....	87	—	87	87	—	87
Pinecrest Sanatorium.....	600 South Chapelgate Lane.....	29	—	29	28	—	28
Baltimore City totals.....		553	—	553	562	—	562
STATE TOTALS.....		7,058	1,234	8,292	6,409	1,044	7,453

aNonwhite patients admitted.

¹Space for 164 additional beds when help is available. 307 patients (on date of survey) were in hospital in temporary beds not counted in complement. Normal at State mental hospitals is based on 45 square feet to bed plus 25 square feet per patient in day rooms. For infirmary and criminally insane patients the beds are at 50 square feet.

TABLE K: SPECIAL HOSPITALS, BED COMPLEMENT AND NORMAL BED CAPACITY BY RACIAL ASSIGNMENT

NAME OF INSTITUTION	LOCATION	BED COMPLEMENT			NORMAL BED CAPACITY		
		White	Nonwhite	Total	White	Nonwhite	Total
Reeves Clinic.....	<i>Allegany County</i> Westernport.....	17	—	17	17	—	17
Fleming Eye, Ear, Nose, and Throat Hospital.....	<i>Washington County</i> Williamsport.....	26	—	26	26	—	26
County totals.....		43	—	43	43	—	43
Baltimore Eye, Ear, and Throat Charity Hospital.....	<i>Baltimore City</i> 1214 Eutaw Place.....	51	14	65	51	14	65
Beck Diagnostic Clinic.....	100 East 23rd Street.....	14	—	14	14	—	14
Children's Hospital School.....	Greenspring Avenue.....	115	15	130	115	15	130
Doctor's Hospital.....	876 Washington Boulevard.....	8	—	8	8	—	8
Presbyterian Eye, Ear, and Throat Hospital.....	1017 East Baltimore Street.....	28	12	40	28	12	40
Baltimore City totals.....		216	41	257	216	41	257
STATE TOTALS.....		259	41	300	259	41	300

PART III

PLANNING

Chapter 5. INTRODUCTION

THE field work completed, the Hospital Survey Committee embarked on the second phase of its work, which consisted of an analysis of existing facilities and related economic, sociologic, geographic, and other factors for the purpose of preparing a comprehensive long-range State Plan.

It was recognized both by the authors of Public Law 725 and the members of the Hospital Survey Committee that, with the number of factors influencing the establishment and utilization of hospital facilities, no exact formula could be established for use in planning hospital facilities for communities.

In the Act, broad basic standards are established. Section 622 of the Act requires that the Surgeon General of the United States Public Health Service, within a period of six months, prescribe general regulations covering the interpretation and operation of the Act.

A tentative set of these regulations, released on November 20, 1946, was discussed with the survey directors of all the States at a meeting held in Washington on December 6, 1946. The purpose of this meeting was to explain the proposed regulations and, at the same time, obtain the benefit of the thinking of the directors for use in the final draft. Final regulations were issued on February 11, 1947, and amended June 10, 1947.

Since the regulations define and interpret the meaning of the Act and are of basic importance in the preparation of the State Plan, they have been included in this report as Appendix B.

Throughout the Act and the Regulations, standards have been established, but it is clear that the intention was to leave the application of the standards to the discretion of the State agency as much as possible.

Where it was found that the regulations were not sufficiently specific for the purpose of making a determination of relative need or priority of a project, the Committee established its own policies or applied its own judgment.

The final plan projects a system of integrated facilities which will provide adequacy of service in all the categories. As an approach to this end, the individual categories were considered separately (Chapters 6 through 10).

Having made a determination of the needs, it was necessary to set up a priority system based on the urgency between and within the categories.

Priorities and the methods and reasoning used in their determination are discussed in Part IV.

Population data

Population statistics were basic factors throughout this program. The allotment of funds to States was calculated by means of a formula in which the population of the State was a factor. The classification of areas as base, intermediate, or rural within the State

was based in part on population. The determination of beds needed in the areas was related to population.

The United States Public Health Service Regulations, Subpart A 53.1 (o) (Appendix B) require that "the latest figure of civilian population certified by the Federal Department of Commerce" be used.

The latest actual count of inhabitants was the Sixteenth Census of the United States, taken in 1940 (Appendix I). As of that date, the population of the State was certified as 1,821,244.

As of November 1, 1943, the United States Bureau of the Census estimated the civilian population of Maryland as 1,982,947.¹ This figure was based on registrations for War Ration Book Four (Appendix I).

As of July 1, 1945, the United States Bureau of the Census issued estimates for the States, crediting Maryland with a civilian population of 2,017,971. This figure established an increase of 35,024 above the November 1, 1943 figure, which originally was used in making the determinations in this study.

The Bureau of Vital Statistics of the Maryland State Department of Health, on November 1, 1945, released an estimate on population for 1945 in which the total for the State was given at 1,999,477. This estimate, based largely on the 1943 data of the United States Bureau of the Census, was not used in final analysis.

No attempt was made to reconcile the November 1, 1943 figures for political subdivisions with the State total estimated by United States Bureau of the Census for 1945, because it would involve questionable assumptions. A pro rata distribution would not give a true result. A projection of a population curve for each county would be unsatisfactory because of the effects of the war. Some areas exhibited extraordinary population increases between 1940 and 1943, while others which had previously shown a consistent increase experienced a decrease for that period.

Since the 1943 civilian population estimates of the United States Bureau of the Census were the latest certified figures for the political subdivisions, they were used for the classification of areas and the allocation of hospital beds. The State Department of Health, as the agency responsible for the hospital construction program, will be vested with authority to revise the State Plan in line with changed conditions. Since the program will be operative over a period of at least five years, later estimates by subdivisions may call for modification of the allocations.

In the meantime, the additional beds to which the State is entitled as a result of the certified increase of civilian population of 35,024 between November 1,

¹United States Bureau of the Census, *Population—Special Reports*. Series P-44, No. 3, February 15, 1944.

1943 and July 1, 1945 were placed in the *pool*,¹ which was allocated on the basis of unusual need. Since the pool is the one point at which the allocation of beds is flexible, it was the logical place to put them. On the State ratio of 4.5 beds per 1,000 population, this resulted in an increase of 158 beds being placed in the pool.

Allocation by way of the pool allowed for as much consideration as any method which might be devised for the apportionment of the differential between the two certified population estimates. Allotment of the total number of pool beds is shown in Table L.

¹ The pool is described further in Chapter 11.

TABLE L: GENERAL HOSPITALS, COMPARISON OF EXISTING NORMAL BED CAPACITIES WITH STANDARDS ESTABLISHED BY PUBLIC LAW 725 FOR BASE, INTERMEDIATE, AND RURAL AREAS¹

AREA ²	POPULATION ³	BEDS NEEDED ACCORDING TO STATE STANDARD	ACCEPTABLE NORMAL BED CAPACITY	BEDS NEEDED ACCORDING TO AREA STANDARDS	DEFICIENCIES BETWEEN AREA STANDARD AND EXISTING BEDS	BEDS ALLOTTED TO AREA FROM POOL	TOTAL BEDS NEEDED
<i>Baltimore Base Area (B-1)</i>		4.5 per 1,000		4.5 per 1,000			
Baltimore City.....	927,941	4,176	4,568				
Baltimore County.....	202,425	911	—				
Anne Arundel County.....	77,070	347	70				
Harford County.....	42,890	193	72				
Howard County.....	18,481	83	—				
Carroll County.....	39,399	177	—				
Base Area Totals.....	1,308,206	5,887	4,710	5,887	1,177	385	6,272
<i>Intermediate Areas</i>		4.5 per 1,000		4.0 per 1,000			
Allegany County (I-1).....	81,302	366	410	325	—	75	485
Washington County (I-2).....	69,890	314	168 ⁴	280	112	—	280
Frederick County (I-3).....	51,774	234	166	207	41	—	207
Montgomery and Prince George's Counties (I-4).....	221,780	998	519	887	368	—	887
Cecil County (I-5).....	32,055	144	72	128	56	—	128
Talbot and Caroline Counties (I-6).....	32,237	145	87	129	42	50	179
Dorchester County (I-7).....	24,264	109	65	97	32	15	112
Wicomico County (I-8).....	32,960	148	177	132	—	70	247
Intermediate Area Totals.....	546,262	2,458	1,664	2,185	651	210	2,525
<i>Rural Areas</i>		4.5 per 1,000		2.5 per 1,000			
Garrett County (R-1).....	18,534	83	—	46	46	—	46
Calvert County (R-2).....	10,549	48	—	26	26	—	26
Charles County (R-3).....	19,784	89	33	49	16	—	49
St. Mary's County (R-4).....	17,877	80	45	45	—	25	70
Kent and Queen Anne's Counties (R-5).....	25,265	114	25	63	38	—	63
Worcester County (R-6).....	19,201	86	—	48	43	12	60
Somerset County (R-7).....	17,269	78	38	43	5	—	43
Rural Area Totals.....	128,479	578	141	320	179	37	357
Population differential from 11/1/43 to 7/1/45 ⁵	35,024	158					
STATE TOTALS.....	2,017,971	9,081	6,515 ⁶	8,392	2,007 ⁷	632 ⁸	9,154

¹Includes acceptable general and special hospital beds.

²Area number given in parentheses.

³United States Bureau of the Census, Estimated Civilian Population, 1943.

⁴Includes 26 beds in Fleming Eye, Ear, Nose and Throat Hospital, which closed after survey was completed.

⁵United States Bureau of the Census, Estimated Civilian Population, 1945.

⁶Includes 44 beds in Allegany County and 29 beds in Wicomico County which are in excess of the State standard for the area. This total of 73 beds accounts for the discrepancy between the standard number of beds at 4.5 per 1,000 (9,081) and the final total number of beds needed (9,154).

⁷Beds in Allegany and Wicomico counties not included.

⁸Pool beds include adjustments both for the difference between the State and area standards, as established by the United States Public Health Service, and for the population increase between 1943 and 1945.

Chapter 6. GENERAL HOSPITALS

THE general hospital is difficult to define concisely. An institution is classified as a general hospital when it admits more than one type of patient. The maintenance of service for medical, surgical, and obstetric cases is usually considered the minimal scope of a hospital so classified. As its field is broadened to include departments rendering services in psychiatry, tuberculosis, specialized surgery, and other fields of medicine, it continues to be classified as a general hospital.

The basic program of a general hospital is considered:

1. Treatment of the sick and injured
2. Education of medical and nursing personnel
3. Prevention of illness, or conversely, the preservation of health
4. Research

The degree to which the full program is executed varies with the size of the hospital, its location, and the availability of personnel.

Included in the category of general hospitals are institutions ranging in size from those maintaining only a few beds and a limited program to large institutions having in excess of 1,000 beds and carrying on the full program.

In spite of the sameness of title and purpose, the utilization of the institutions as to area served and efficiency of operation varies with the size of the hospital, its relation to other institutions, and the type of patients treated. Because of these variables, two basic factors were necessarily considered in determining an adequacy of service for all communities.

Of first importance was the determination of the location and size of the hospital which might be relatively accessible and which could be maintained and utilized efficiently by the people for whose service it was intended.

The second consideration was to develop a plan of integration, by which services which could not be duplicated in every community would be made available generally.

The standards issued by the United States Public Health Service, in which variables in bed ratios to population were established, were based on detailed studies (Appendix B, Subpart A 53.1 (a), (b), (c), and (d)).

These standards for base, intermediate, and rural areas, 4.5, 4.0, and 2.5 beds per 1,000 population, respectively, were used in classifying the areas of the State and determining the number of general hospital beds needed. Since the State standard of beds was established at 4.5 per 1,000 population, the beds in excess of area standards were considered pool beds. A regional plan of services was drawn up to indicate the points to which communities might turn for services not locally available (Chapter 6, Section 3).

The institutions classified as general hospitals in Maryland range in complement from 17 beds to 984

beds (Table G). Most of the smaller hospitals serve their local communities, whereas the Johns Hopkins Hospital, the largest general hospital in the State, serves the world.

Most small hospitals maintain services for medical and uncomplicated surgical and obstetric cases. As the size of the hospital increases, there is a proportionate broadening of its fields of work.

After a study of the population distribution and the existing facilities, including some reclassifications and deletions because of unsatisfactory structures, the areas in the three classifications were set up as defined in the Regulations (Table L and Map 1).

It will be noted in Table L that 632 beds remained for allocation as pool beds, after all areas were assigned the maximum number of beds according to area standards.

Only one district, Baltimore City and the surrounding counties, qualified as a base area. There are eight areas classified as intermediate and seven as rural.

The areas and the reasoning behind their establishment are contained in later sections where the general hospital service areas are discussed individually.

No hospital communities were designated as area centers because, in most instances, hospital service areas are served by facilities in one community within the area. The base and district hospitals in the regional centers are considered to serve as centers.

Where more than one community exists in a service area, it was felt that the institutions were of comparable status; hence they were not expected to serve as consultation centers. It is expected that such services will be available to all institutions in the State, flowing from the base or district hospitals.

Table M analyzes the utilization of hospitals beds in relation to population. Having the number of admissions, and the number of patient days, it was possible to calculate the average length of stay per patient. Table N, which lists the origin, or place of residence, of patients discharged from general hospitals, gives a basis for determining the area served by each institution. The information contained in this table was based on sample studies by the hospitals, since such data are not maintained as a regular hospital procedure.

Territorial coverage

The general hospitals of the State were plotted on Map 2, which shows the distribution of population according to the 1940 Census. An area with a radius of 12½ miles was circumscribed around each hospital location.

With transportation highly developed, in the absence of natural barriers, the services of a hospital are readily accessible within a radius of 12½ miles. It is not a hardship for a patient to travel as far as 25 miles to get care, if facilities are available at the end of the trip.

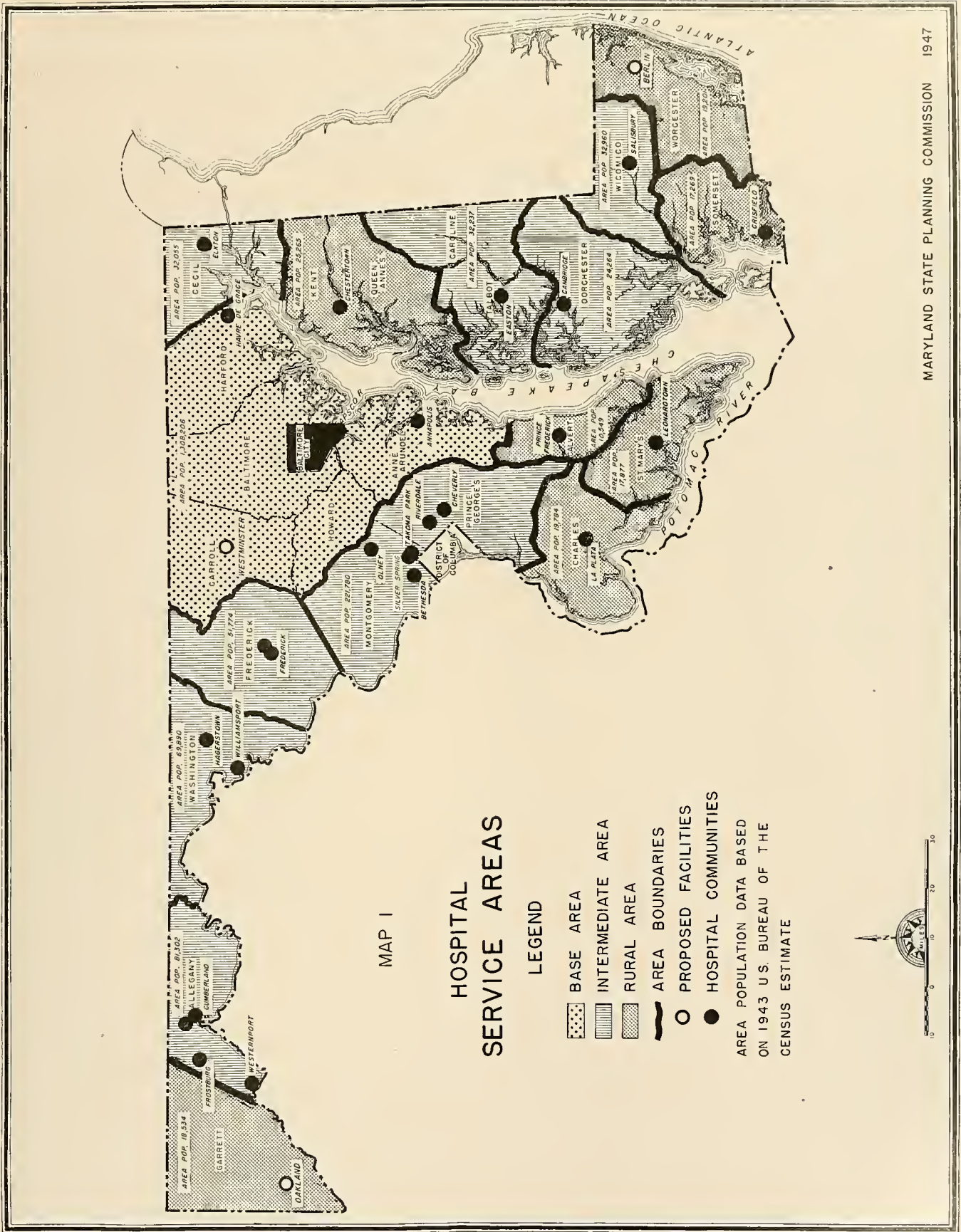


TABLE M: UTILIZATION OF GENERAL HOSPITAL BEDS

NAME OF INSTITUTION	ADMISSIONS	PATIENT DAYS	BED COMPLEMENT	NORMAL BED CAPACITY	BEDS PER 1,000 POPULATION ¹	PATIENT DAYS BED PER YEAR ¹	PER CENT OCCUPANCY ¹	DAYS AVERAGE STAY
<i>Allegany County</i>					(81,302)			
Allegany Hospital	3,418	28,038	124	124		226.1	61.9	8.2
Memorial Hospital	6,064	60,774	218	218		278.8	76.4	10.0
Miners Hospital	1,162	11,042	51	51		216.5	59.3	9.5
Reeves Clinic (special)	400	835	17	17		49.1	13.5	2.1
TOTALS	11,044	100,689	410	410	5.0	245.6	67.3	9.1
<i>Anne Arundel County</i>					(77,070)			
Annapolis Emergency Hospital	2,103	15,841	70	70	0.9	226.3	62.0	7.5
<i>Calvert County</i>					(10,549)			
Calvert County Hospital	698	4,251	26	26	2.5	163.5	44.8	6.1
<i>Cecil County</i>					(32,055)			
Union Hospital	1,457	16,504	72	72	2.2	229.2	62.8	11.3
<i>Charles County</i>					(19,784)			
Physicians Memorial Hospital	830	4,425	31	33	1.7	134.1	36.7	5.3
<i>Dorchester County</i>					(24,264)			
Cambridge-Maryland Hospital	1,634	14,110	75	65	2.7	217.1	59.5	8.6
<i>Frederick County</i>					(51,774)			
Frederick City Hospital	3,157	30,195	125	111		272.0	74.5	9.6
Frederick County Emergency Hospital	550	13,140	53	55		238.9	65.5	23.9
TOTALS	3,707	43,335	178	166	3.2	261.1	71.5	11.7
<i>Harford County</i>					(42,890)			
Fountain Green Hospital	215	2,457	17	17		144.5	39.6	11.4
Harford Memorial Hospital	2,847	20,990	72	72		291.5	79.9	7.4
TOTALS	3,062	23,447	89	89	2.1	263.4	72.2	7.7
<i>Kent County</i>					(13,071)			
Kent and Queen Anne's General Hospital	1,074	6,313	31	25	1.9	252.5	69.2	5.9
<i>Montgomery County</i>					(104,155)			
Montgomery County General Hospital	1,327	12,025	40	40		300.6	82.4	9.1
Suburban Hospital	2,208	19,985	102	102		195.9	53.7	9.1
Washington Sanitarium and Hospital	3,511	61,931	201	188		329.4	90.3	17.6
TOTALS	7,046	93,941	343	330	3.2	284.7	78.0	13.3
<i>Prince George's County</i>					(117,625)			
Eugene Leland Memorial Hospital	1,730	14,042	87	87		161.4	44.2	8.1
Prince George's General Hospital	3,349	26,390	102	102		258.7	70.9	7.9
Warren Hospital	479	5,856	17	17		344.5	94.4	12.2
TOTALS	5,558	46,288	206	206	1.8	224.7	61.6	8.3
<i>St. Mary's Hospital</i>					(17,877)			
St. Mary's Hospital	1,046	9,447	45	45	2.5	209.9	57.5	9.0
<i>Somerset County</i>					(17,269)			
Edward W. McCready Memorial Hospital	769	7,914	38	38	2.2	208.3	57.1	10.3
<i>Talbot County</i>					(16,190)			
Easton Memorial Hospital	2,940	28,692	108	87	5.4	329.8	90.4	9.8
<i>Washington County</i>					(69,390)			
Washington County Hospital	6,149	63,640	185	142	2.0	448.2	122.8	10.3
<i>Wicomico County</i>					(32,960)			
Peninsula General Hospital	5,955	47,947	177	177	5.4	270.9	74.2	8.1
County totals	55,072	526,784	2,084	1,981	(1,055,006) 1.9	265.9	72.9	9.6
<i>Baltimore City</i>					(927,941)			
Baltimore City Hospitals	4,828	57,242	513	513		111.6	30.6 ²	11.9
Bon Secours Hospitals	4,823	39,000	142	142		274.6	75.2	8.1
Church Home and Hospital	5,831	48,761	165	165		295.5	81.0	8.4
Franklin Square Hospital	4,156	36,429	202	173		210.6	57.7	8.8
Hospital for Women of Maryland	3,981	37,421	124	124		301.8	82.7	9.4
Johns Hopkins Hospital	17,850	244,303	984	873		279.8	76.7	13.7
Maryland General Hospital	5,213	71,173	242	235		302.9	83.0	13.7
Mercy Hospital	7,460	87,736	287	281		312.2	85.5	11.8
Provident Hospital	2,793	35,628	125	125		285.0	78.1	12.8
St. Agnes Hospital	6,280	66,416	221	184		361.0	98.9	10.6
St. Joseph's Hospital	7,847	74,680	250	250		298.7	81.8	9.5
Sinai Hospital	6,126	83,706	300	300		279.0	76.4	13.7
South Baltimore General Hospital	4,473	43,057	150	135		318.9	87.4	9.6
Sydenham Hospital	1,219	18,180	100	100		181.8	49.8	14.9
Union Memorial Hospital	7,914	104,832	341	341		307.4	84.2	13.2
Volunteers of America Hospital	480	5,101	40	40		127.5	34.9	10.6
West Baltimore General Hospital	4,271	49,042	186	186		263.7	72.2	11.5
University Hospital	10,179	143,538	435	435		330.0	90.4	14.1
Baltimore City totals	105,724	1,246,245	4,807	4,602	5.0	270.8	74.2	11.8
STATE TOTALS	160,796	1,773,029	6,891	6,583	(1,982,947) 3.3	269.3	73.8	11.0

¹Based on normal bed capacity and 1943 estimated civilian population (given in parentheses).²Low occupancy rate attributable to closing of part of hospital because of shortage of personnel.

NAME OF INST

<i>Allegany County</i>
Allegany Hospital . . .
Memorial Hospital . . .
Miners Hospital
<i>Anne Arundel County</i>
Annapolis Emergency I
<i>Calvert County</i>
Calvert County Hospit
<i>Cecil County</i>
Union Hospital
<i>Charles County</i>
Physicians Memorial H
<i>Dorchester County</i>
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<i>Harford County</i>
Fountain Green Hospit
Harford Memorial Hos
<i>Kent County</i>
Kent and Queen Anne'
<i>Montgomery County</i>
Montgomery County C
Suburban Hospital . .
Washington Sanitarium
<i>Prince George's County</i>
Eugene Leland Memor
Prince George's Genera
Warren Hospital
<i>St. Mary's County</i>
St. Mary's Hospital . .
<i>Somerset County</i>
Edward W. McCreedy
<i>Talbot County</i>
Easton Memorial Hosp
<i>Washington County</i>
Washington County Ho
<i>Wicomico County</i>
Peninsula County Hosp
County totals
<i>Baltimore City</i>
Baltimore City Hospita
Bon Secours Hospital .
Church Home and Hos
Franklin Square Hospit
Hospital for Women of
Johns Hopkins Hospita
Maryland General Hos
Mercy Hospital
Provident Hospital . .
St. Agnes Hospital . .
St. Joseph's Hospital .
Sinai Hospital
South Baltimore Gener
Sydenham Hospital . .
Union Memorial Hospit
Volunteers of America
West Baltimore Genera
University Hospital . .
Baltimore City Totals . .

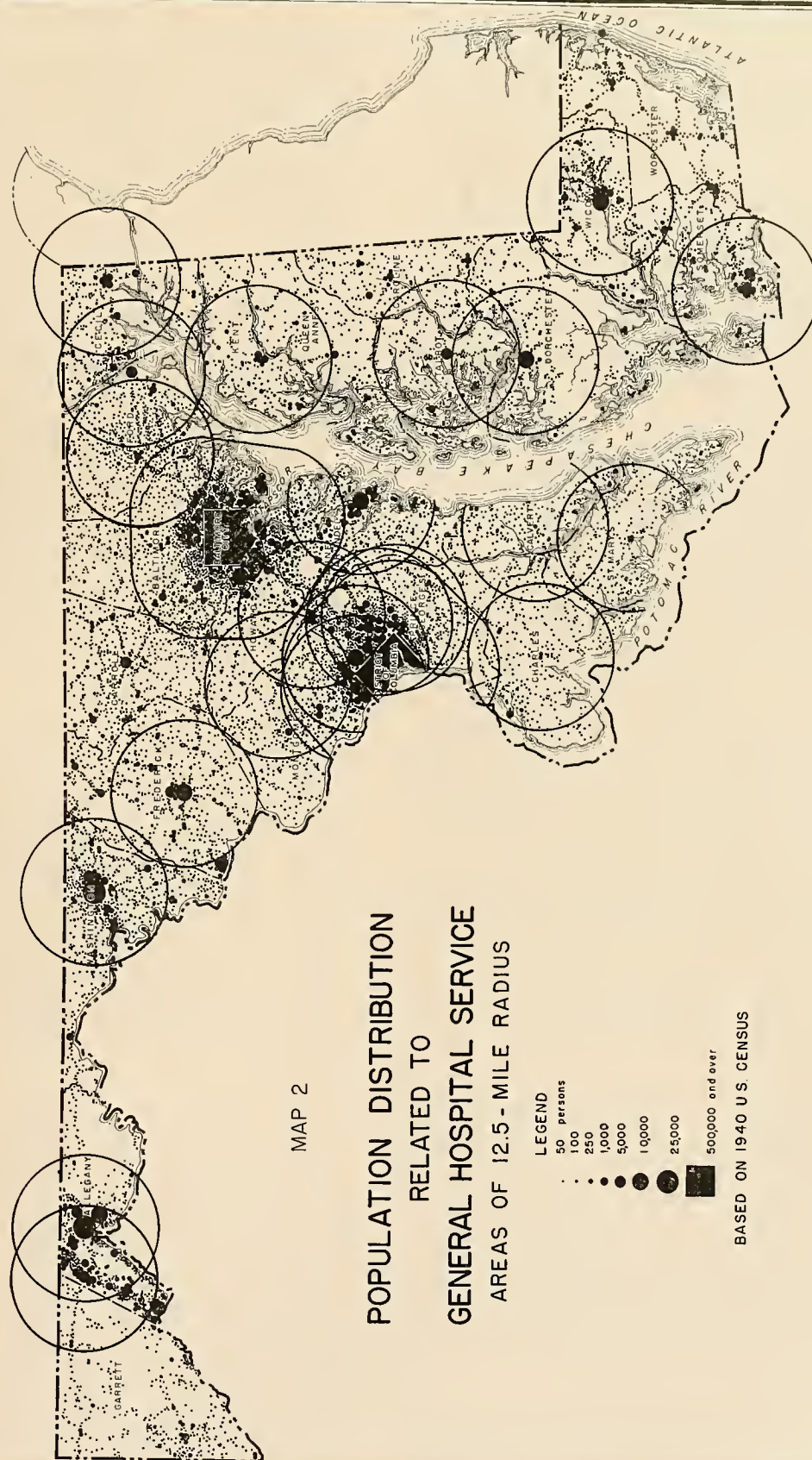
STATE TOTALS . . .

a Included in total.

TABLE N: GEOGRAPHIC DISTRIBUTION OF PATIENTS DISCHARGED FROM GENERAL HOSPITALS, BASED ON SAMPLE STUDIES

NAME OF INSTITUTION	TOTAL	BALTIMORE CITY	ALLEGANY COUNTY	ANNE ARUNDEL COUNTY	BALTIMORE COUNTY	CALVERT COUNTY	CAROLINE COUNTY	CARROLL COUNTY	CECIL COUNTY	CHARLES COUNTY	DORCHESTER COUNTY	FREDERICK COUNTY	GARRETT COUNTY	HARFORD COUNTY	HOWARD COUNTY	KENT COUNTY	MONTGOMERY COUNTY	PRINCE GEORGE'S COUNTY	QUEEN ANNE'S COUNTY	ST. MARY'S COUNTY	SOMERSET COUNTY	TALBOT COUNTY	WASHINGTON COUNTY	WICOMICO COUNTY	WORCESTER COUNTY	UNASSIGNED	OUT OF STATE						FOREIGN
																											PENNSYLVANIA	VIRGINIA	WEST VIRGINIA	DELAWARE	DISTRICT OF COLUMBIA	OTHER STATES	
<i>Allegany County</i> Allegany Hospital.....	3,405		2,750										51										12			11						581	
Memorial Hospital.....	6,059		3,601										574													78	548						
Miners Hospital.....	1,154		1,019										135																				
<i>Anne Arundel County</i> Annapolis Emergency Hospital.....	2,118			2,037		8												9		4						24						36	
<i>Calvert County</i> Calvert County Hospital.....	691			19		629				1									6							17						19	
<i>Cecil County</i> Union Hospital.....	1,449								1,376																	58						15	
<i>Charles County</i> Physicians Memorial Hospital.....	826									752									35		35					4							
<i>Dorchester County</i> Cambridge-Maryland Hospital.....	1,618										1,560															58							
<i>Frederick County</i> Frederick City Hospital.....	3,760							506				2,784			6		293						33			60						78	
Frederick Cousty Emergency Hospital ..	550											550																					
<i>Harford County</i> Fountain Green Hospital.....	188													188																			
Harford Memorial Hospital.....	2,841								439					2,290																			
<i>Kent County</i> Kent and Quseec Anne's General Hospital ..	1,073															801			249													112	
<i>Montgomery County</i> Montgomery County General Hospital ..	1,304														136		1,056	41								22						23	
Suburban Hospital.....	2,151																1,676									45			44		386	49	
Washington Sanitarium and Hospital.....	3,507																1,753															1,754	
<i>Prince George's County</i> Eugene Leland Memorial Hospital.....	1,748																	40	1,345							136						227	
Prince George's General Hospital.....	3,338																	3,205								67						66	
Warren Hospital.....	479																	479															
<i>St. Mary's County</i> St. Mary's Hospital.....	1,061																			1,061													
<i>Somerset County</i> Edward W. McCready Memorial Hospital ..	762																				602				120			40					
<i>Talbot County</i> Easton Memorial Hospital ..	3,334						709				156				24					450		1,551				444							
<i>Washington County</i> Washington County Hospital.....	5,377																						4,613			40	550		130			44	
<i>Wicomico County</i> Peninsula County Hospital.....	5,912																							512	3,270	1,186	135	a	a			809	
County totals.....	54,705		7,370	2,056		637	709	506	1,815	753	1,716	3,334	760	2,478	142	825	4,818	5,120	699	1,100	1,114	1,551	4,658	3,270	1,306	1,199	1,098	84	1,388	386	3,813		
<i>Baltimore City</i> Baltimore City Hospitals.....	5,154	4,683		24	289																					121						37	
Bon Secours Hospital.....	4,796	4,796																															
Church Home and Hospital.....	5,841	3,194																														322	
Franklin Square Hospital.....	4,163	3,667		65	297	1		68	1			2		21	18	4	2	2		1		2		2		2,325						10	
Hospital for Women of Maryland.....	4,096	2,581																									1,425						
Johns Hopkins Hospital.....	17,864	9,732																									3,666				4,231	235	
Maryland General Hospital.....	5,158	4,642																									516						
Mercy Hospital.....	7,500	6,855																									491				154		
Provident Hospital.....	2,773	2,718																									55						
St. Agnes Hospital.....	6,290	3,537		71	1,959			44				36		63	419	27		17		10						35					72		
St. Joseph's Hospital.....	7,881	5,911			1,572																					398					a		
Sinai Hospital.....	6,114	5,811			a																					303					a		
South Baltimore General Hospital.....	4,485	4,058																								398						29	
Sydenham Hospital ..	1,219	990																								229							
Union Memorial Hospital.....	7,915	5,310																									2,605						
Volunteers of America Hospital.....	479	300																									119				60		
West Baltimore General Hospital.....	4,272	3,204		a	a			a						a				a									1,068						
University Hospital ..	10,179	6,315																									3,512				352		
Baltimore City Totals.....	106,089	78,304		160	4,117	1		112	1			38		84	437	31	2	19		11		2		2		17,266					5,267	235	
STATE TOTALS.....	160,794	78,304	7,370	2,216	4,117	638	709	618	1,816	753	1,716	3,372	760	2,562	579	856	4,820	5,139	699	1,111	1,114	1,553	4,658	3,272	1,306	18,455	1,098	84	1,388	986	9,080	235	

a Included in total.



When Map 2 was originally prepared by the Maryland State Planning Commission, different size dots were used to indicate varying numbers of people residing in the areas. After the hospitals were spotted on the map and circles of 12 $\frac{1}{2}$ -mile radius drawn, the dots outside the circles were counted. The adjoining tabulation discloses the number of persons estimated to be living outside the 12 $\frac{1}{2}$ -mile radii.

From this study, it is apparent that four counties have important segments of population residing more than 12 $\frac{1}{2}$ miles from a general hospital: Caroline, Carroll, Garrett, and Worcester counties.

When areas with a 25-mile radius were described on the map, which distance is not too great for patients to travel to suitable medical facilities, the State was practically covered in its entirety. The only exception was the western half of Garrett County and a portion of Worcester County.

It was therefore concluded that, with few exceptions, the hospitals of the State are well distributed and that most of the new construction should be as additions to existing hospitals, unless hospitals are of such construction that they should be condemned.

¹United States Bureau of the Census, 16th Census of the United States, 1940.
²N, S, E, and W indicate the direction in which the excluded population groups are located.

COUNTY	POPULATION 1940 ¹	OUTSIDE 12 $\frac{1}{2}$ - MILE RADIUS ²	INSIDE 12 $\frac{1}{2}$ - MILE RADIUS
Allegany.....	86,973	5,400	81,573
Anne Arundel	68,375	200	68,175
Baltimore.....	155,825	9,200	146,625
Calvert.....	10,484	550	9,934
Caroline.....	17,549	13,850	3,699
Carroll.....	39,054	36,454	2,600
Cecil.....	26,407	1,400	25,007
Charles.....	17,612	1,150 S	15,712
		750 W	
Dorchester.....	28,006	5,550	22,456
Frederick.....	57,312	3,800 S	50,312
		3,200 N, E	
Garrett.....	21,981	18,681	3,300
Harford.....	35,060	12,400	22,660
Howard.....	17,175	—	17,175
Kent.....	13,465	2,300	11,165
Montgomery.....	83,912	3,000	80,912
Prince George's.....	89,490	1,600	87,890
Queen Anne's	14,476	8,150	6,326
St. Mary's.....	14,626	3,500	11,126
Somerset.....	20,965	4,600	16,365
Talbot.....	18,784	—	18,784
Washington.....	68,838	4,850 W	59,588
		4,150 S	
		250 E	
Wicomico.....	34,530	1,150 E	29,480
		3,900 W	
Worcester.....	21,245	21,245	—
County totals.....	962,144	171,280	790,864
Baltimore City.....	859,100	—	859,100
STATE TOTALS.....	1,821,244	171,280	1,649,964

Section 1. Allocation of Beds and Establishment of Priorities

The allocation of facilities and the establishment of priorities in the category of general hospitals present some problems not common to other groups. Some questions which arise in planning of all categories are more complex in the case of general hospitals.

The planning for tuberculosis, chronic disease, and mental hospitals, and public health facilities is simplified. With the exception of public health facilities, those institutions are few in number and serve large areas of the State.

In the case of general hospitals, the areas are smaller and, in most instances, the institutions are autonomous.

Distribution

In Appendix B, Subpart A 53.1 of the Regulations gives the over-all general directions and standards for the different types of areas. In areas where general hospital beds exist in excess of the State standard for that area, such excess beds are not counted against the State standard of 4.5 (Subpart B 53.12).

The primary consideration for the allocation of general hospital beds by areas is population. Left to the discretion of the Committee for assignment are those beds in the pool created by the differentials between area standards and the over-all State standard of 4.5 beds per 1,000 population (Subpart B 53.13).

Priority of projects

The determination of priority ratings between the categories and between projects within the categories is a more complex procedure. In the Regulations, Subpart E 53.43 and 53.44, general principles for this

part of the planning are set down, but some interpretations and detailed policies are left the State agency.

New installations are granted first priority, except where replacements are of a minor character or where a public hazard is to be replaced. Priority of public health center facilities is dependent on certification by the State Department of Health that existing facilities are unsuitable for use.

The relative priority of projects is based on urgency, special consideration being given to rural areas with relatively small financial resources. Projects intended to provide a balancing of facilities available for racial groups are considered. Priorities are discussed in detail in Part IV.

Determining distribution of general hospital beds

While the basic consideration in the allocation of general hospital beds is the ratio of existing and proposed beds to population, modifying factors are geographic barriers and location, socio-economic factors, availability of professional and lay personnel, and past experiences of existing hospitals in the area.

The basic intent of Public Law 725 is to provide financial aid toward the construction of hospital facilities at points of determined need. Studies have shown that hospital facilities now exist in direct ratio to per capita income and not according to population (Appendix P). This program is designed to correct this imbalance of beds to population. The first step, therefore, is the relating of population to beds.

As previously stated, only four areas in the entire

State have important segments of population living more than 12½ miles from a general hospital.

The residents of Caroline County are largely dependent upon the Memorial Hospital at Easton for service.

Carroll County residents use primarily the hospital facilities of Baltimore, but some use the facilities in Frederick City and Hanover, Pennsylvania.

Garrett County is served by the Miners Hospital at Frostburg, and the Memorial Hospital and Allegany Hospital in Cumberland.

Worcester County residents go to the Peninsula General Hospital at Salisbury.

A detailed study of the needs of each county and Baltimore City is contained in Section 2 of this Chapter.

Policies established as a guide

The policies listed below were established as a guide in the allocation of beds.

1. Proprietary hospitals are eliminated.
2. Institutions having buildings which are considered hazards are also excluded, except for consideration on a replacement basis.
3. Hospitals whose ancillary departments have sufficient capacity to meet the needs imposed by additional beds are given precedence over institutions whose departments are already taxed by service to the existing beds.
4. Hospitals having more than 100 beds will have priority over small hospitals within the area,

unless the additional beds would result in a capacity of more than 100 beds.

5. Since the training of hospital personnel is of such importance to the over-all program of medical care, special consideration will be given to hospitals whose training program would be improved or enlarged by the additional facilities.
6. No application will be approved under this Plan unless the applicant includes therein the following statement: The applicant hereby assures the State agency that it will make its facilities available to all persons residing in the area to be served without discrimination on account of race, creed, or color; provided, however, such statements will not be required from applicants in any specific area for which PHS-8 (HF) is subsequently submitted as an amendment to this Plan. (Note: PHS-8 (HF) provides for a specific statement of the number of beds assigned to each race.)
7. Reasonable evidence should be available to show that the hospital is in a position financially to maintain and operate the facilities.
8. A hospital must be in a detached building, no part of which is used for other than hospital purposes, in order to be considered an acceptable hospital.
9. Institutions considered unacceptable are not to be identified, and where more than one such institution exists in an area only their total bed capacity is to be shown.

Section 2. Service Areas¹

ALLEGANY COUNTY

INTERMEDIATE AREA NUMBER 1

<i>Population</i>		<i>Change from previous period</i>	<i>Change over 1920</i>
1943:	81,302	5,671 decrease	16.2% increase
1940:	86,973	7,875 increase	24.3% increase
1930:	79,098	9,160 increase	13.1% increase
1920:	69,938		
<i>Nonwhite population</i>		<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945:	1,220	1.5	1945: \$1,280.74
1940:	1,322	1.5	1940: \$ 600.16
Classification of residents, 1940			
<i>Urban</i>		<i>Rural nonfarm</i>	<i>Rural farm</i>
58.3%		34.6%	7.1%
<i>Land area: 426 square miles</i>			
<i>Population per square mile, 1943: 190.8</i>			
<i>County seat: Cumberland</i>		<i>Population</i>	1940: 39,483
			1930: 37,747
Births in hospitals as per cent of total births, 1945			
<i>Total</i>		<i>White</i>	<i>Nonwhite</i>
82.4		82.6	72.7
General hospital facilities			
<i>Institution</i>		<i>Location</i>	<i>Beds</i>
Allegany Hospital		Cumberland	124
Memorial Hospital		Cumberland	218
Miners Hospital		Frostburg	51
Reeves Clinic (special)		Westernport	17

¹Sources of statistical data used herein are given in Appendices I through O.

Geographic considerations

Allegany County lies in the mountainous part of Western Maryland, west of Washington County and east of Garrett County. It is bounded by Pennsylvania on the north and is separated from West Virginia on the south by the Potomac River.

The County has 426 square miles of area, being the twelfth county in the State in size. Most of the surface is mountainous. The mountain ridges run generally north and south. Therefore, the western section is somewhat isolated from the eastern portion of the County.

Population

The population of Allegany County was 81,302 in 1943. A steady increase in population was experienced from 1920 to 1940, but a decrease took place between 1940 and 1943.

This reversal of trend was construed as being due largely to the war and not to a change of industrial character. The area already had made important strides toward converting from coal mining to manufacturing before the war period. It can be assumed that with the end of the war, the normal trend will be re-established, but at a less rapid rate of increase than was experienced in previous decades. The over-all net increase in population between 1920 and 1943 was 11,364, or 16.2%.

The density of population in 1943 was 190.8 persons per square mile, which places Allegany County as the fourth county in the State in this respect.

The population is concentrated in and around Cumberland which had 45.4% of the total population of the County in 1940. Cumberland, with a population of 39,483 in 1940, is located near the center of the County. The eastern half of the County is thinly populated along Route 40, leading to Hancock and Hagerstown, and along Route 51, which skirts the southern boundary to the southeast. The western half of the County is more densely populated, having approximately 94% of the population when Cumberland is included.

Other smaller communities are located along Route 36, which parallels and runs close to the western boundary.

The population by election districts in 1940 was as follows:

District 1, Orleans	804
District 2, Oldtown	987
District 3, Flintstone	1,284
District 4, Cumberland Canal	14,840
District 5, Wills Creek	7,925
District 6, Cumberland River	8,351
District 7, Rawlings	2,820
District 8, Westernport	5,658
District 9, Barton	1,673
District 10, Lonaconing	1,846
District 11, Frostburg	1,148
District 12, Frostburg	1,456
District 13, Mount Savage	3,245
District 14	1,944
District 15, Lonaconing	2,450
District 16, North Branch	1,670
District 17, Vale Summit	390
District 18, Midland	1,954
District 19, Shaft	949
District 20, Ellerslie	1,569

District 21, Gross	969
District 22, Union Street	4,875
District 23, Dacatur Street	4,755
District 24, Eckhart	1,955
District 25, Pekin	711
District 26, Frostburg	2,061
District 27, Gilmore	662
District 28, Frostburg	1,872
District 29, La Vale	3,088
District 30, Zihlman	589
District 31, McCool	905
District 32, Frostburg	1,215
District 33, Kifer	353

The nonwhite population, numbering 1,220, made up 1.5% of the population of the County in 1945.

As of 1940, the residents were 58.3% urban, 34.6% rural nonfarm, and 7.1% rural farm.

Transportation

Allegany County is adequately served by highways running to all parts of the County from Cumberland and extending into Pennsylvania and West Virginia. The Western Maryland and Baltimore and Ohio railroads cross the County from east to west, passing through Cumberland. Routes 40 and 51 cross the County east and west. Two other highways, Routes 220 and 36, run north and south through the western half of the County. Local and long-distance bus lines supplement the railroad service.

Cumberland, the industrial, commercial, and medical center of the County, therefore, is accessible to all residents of the County by means of public and private transportation.

Industry and commerce

The eastern half of Allegany County between Cumberland and the Washington County line is devoted largely to horticulture. The economy of the western half, including Cumberland and extending to the western and southern extremities, is based on coal mining, manufacturing, and transportation. Large employers are the Baltimore and Ohio Railroad, Western Maryland Railroad, Celanese Corporation, West Virginia Pulp and Paper Company, and Kelly Springfield Tire Company. There are also many small manufacturing plants in the area.

The decline in the production and employment at the coal mines, due to the depletion of the coal supply, has been offset to some degree by the establishment of manufacturing industries, such as the Celanese Corporation just west of Cumberland. This area has been successfully undergoing a transition in its economic structure for a period of twenty years.

The income per capita for Allegany County was \$600.16 in 1940, and rose to \$1,280.74 in 1945. The per capita income for the State of Maryland for 1945 was \$1,291.61.

Physicians

Seventy physicians practice in Allegany County, making a ratio of one physician to each 1,161 persons. They are distributed as follows:

Cumberland	57	Lonaconing	2
Frostburg	4	Mount Savage	1
Piney Grove	1	Westernport	3
Barton	1	Luke	1

Sixty of the 70 physicians have hospital affiliations. Their fields of practice are:

General.....	38	Pediatrics.....	2
X-ray.....	2	Surgery.....	9
Genito-urinary.....	1	Public health.....	2
Eye, ear, nose, and throat.....	8	Obstetrics.....	2
Gynecology.....	1		

GENERAL HOSPITAL FACILITIES

ALLEGANY HOSPITAL

The Allegany Hospital, located in Cumberland, is owned and operated by the Daughters of Charity of St. Vincent de Paul. It was established by a board of laymen in 1906 and taken over by the Catholic Order in 1911.

It is a general hospital and has special departments for obstetrics and pediatrics. It holds full approval by the American College of Surgeons. The school of nursing has State-approval.

The directing board is made up of four Sisters who serve for a period of one year. The administrator is appointed by the Board on recommendation of the Superior.

A group known as the Ladies' Aid devotes its efforts to sewing and raising funds for the hospital.

Area served: During 1946, 3,405 patients were discharged, accounting for 33,960 days of service. The patients were largely from the local area, 50% being from Cumberland, and 31% from Allegany County outside of Cumberland.

Buildings: The original buildings and several added wings which are of brick construction are classed as fire-resistant.

Bed capacity: The present capacity is 124 beds. No beds are set aside for nonwhite patients because the demand for service by this group is not great enough to warrant such an arrangement.

Utilization: The rate of occupancy of its beds was 61.9%. The average length of stay per patient was 8.2 days.

Patients discharged were in the following classifications:

	Number of patients	Per cent
Medical.....	725	21.3
Surgical.....	1,723	50.6
Obstetric.....	249	7.3
Pediatric.....	616	18.1
Other.....	92	2.7
TOTALS.....	3,405	100.0

Medical staff: The Medical Staff is organized. Its officers and committees assist with the establishment of medical standards and analyses of quality of service.

Specialized divisions are set up in medicine, surgery, obstetrics, urology, eye, ear, nose, and throat, anesthesia, pathology, and dentistry. Chiefs are appointed for each type of service. Two dentists are on call. The privilege to work in surgery and the specialties is granted on recommendation of the Credentials Committee.

Personnel: The personnel consists of 200.5 full-time and 19.5 part-time employees, making a ratio of 1.7 employees per bed. Part-time employees were calculated on the basis of 50% employment.

Educational activities: The educational program includes a State-approved school of nursing. There were 100 students in training as of the date of the survey.

Building plans: At the present time, there are no plans for the expansion of this hospital.

MEMORIAL HOSPITAL

The Memorial Hospital, located in Cumberland, is the largest general hospital in the State outside of the City of Baltimore. It is owned jointly by the City of Cumberland and Allegany County. The original managing board of seven members was appointed by the Governor of the State, but from that point forward it has been self-perpetuating.

This hospital is the successor to the Western Maryland Hospital of Cumberland, which it absorbed in 1929.

It has special departments set up in the fields of obstetrics, pediatrics, and eye, ear, nose, and throat. The American College of Surgeons has given its full approval. The nursing school has State-approval.

The Women's Auxiliary supports the cancer clinic and nursing school. This group has a membership of 500.

Area served: Approximately 38% of the patients served in 1945 were from Cumberland and 21% from the rest of Allegany County. Garrett County residents accounted for 9% of the total number of patients treated; West Virginia, 21%; and Pennsylvania, 9%.

Buildings: The buildings are fire-resistant. They were constructed in 1929.

Bed capacity: The capacity is 218 beds.

Utilization: The rate of occupancy for 1945 was 76.4% and the average stay per patient, 10 days. The patients discharged were classified as follows:

	Number of patients	Per cent
Medical.....	1,163	19.2
Surgical.....	2,351	38.8
Obstetric.....	842	13.9
Pediatric.....	1,479	24.4
Other.....	224	3.7
TOTALS.....	6,059	100.0

Medical staff: The Medical Staff is organized, having elected officers and standing committees which assist with medical problems and standards. The privilege of doing surgery is granted after four years of residency. Privileges are granted in the various specialties on the basis of demonstrated ability in the field. There are 26 physicians on the Active Staff, 26 on the Courtesy Staff, and four on the Consulting Staff. Four dentists are on call.

Personnel: The personnel is made up of 268 full-time employees. This establishes a ratio of 1.2 employees per bed.

Educational activities: A State-approved school of nursing is maintained. As of the date of the survey, 119 students were in training.

Building plans: At present there are no projected construction plans.

MINERS HOSPITAL

The Miners Hospital at Frostburg, 11 miles west of Cumberland, is owned and operated by the State of Maryland. It was built by the State in 1913.

It is a general hospital and has set up a separate obstetric department. It holds provisional approval by the American College of Surgeons.

It is managed by a board of seven members, four of whom are appointed by the Governor and three elected by the Board.

Area served: Eighty-eight per cent of the patients admitted to this hospital were residents of Allegany County. Twelve per cent were residents of Garrett County.

Buildings: The building is of brick construction, but the floors are wood and inflammable.

Bed capacity: The capacity is 51 beds, two of which are reserved for nonwhite patients.

Utilization: The occupancy rate is 59.3%, and the average length of stay is 9.5 days. A classification of discharged patients according to diagnosis resulted in the following groups:

	Number of patients	Per cent
Medical.....	122	10.6
Surgical	754	65.3
Obstetric.....	278	24.1
TOTALS.....	1,154	100.0

Medical staff: The Medical Staff is not organized. Any physician holding a Maryland State license to practice is permitted to attend patients. Four local physicians make up the Staff.

Personnel: The personnel includes 24 full-time and three part-time employees, making a ratio of 0.5 employee per bed. Part-time employees were calculated on the basis of 50% employment.

Educational activities: There is no educational program.

Building plans: The State has set up a fund of \$80,000 for the addition of 20 beds and general renovation of the hospital.

REEVES CLINIC

The Reeves Clinic, located at Westernport in the southwestern corner of Allegany County, was established in 1938 by Doctors R. W. and J. N. Reeves. They operate it as a partnership.

Area served: Patients are admitted from all parts of western Maryland and northern West Virginia.

Building: The building is of modern construction and includes the owners' offices.

Bed capacity: The capacity is 17 beds.

Utilization: Work is limited largely to the field of eye, ear, nose, and throat. Emergencies are taken care

of from time to time. The rate of occupancy was 13.5% and the length of stay per patient was 2.1 days.

Personnel: The personnel consists of 10 employees, making a ratio of 0.6 employee per bed.

Building plans: No projected building program was reported.

Conclusions

Allegany County, containing Cumberland, which is the second largest city in the State, has had developed within its bounds the four hospitals described. None is located in the eastern half of the County. Only 5,400 of its residents live more than 12½ miles from the Cumberland and Frostburg hospitals. This figure is reduced further when taking into consideration the proprietary hospital at Westernport.

On the basis of the 393 beds in the three nonprofit general hospitals there are 4.83 beds per 1,000 population. Taking into consideration the additional 17 beds in the hospital at Westernport, the ratio is 5.0 beds per 1,000 population. This is above the standard of 4.0 beds per 1,000 population for an intermediate area and also above the standard for the State of 4.5 beds per 1,000 population. In spite of this apparent excess of beds, the hospitals in Allegany County operate at an average occupancy rate of 67.3% with an average length of stay per patient of 9.1 days. These hospitals reported a total of 11,044 admissions for the year, accounting for 100,689 patient days of service. All of these factors indicate a high utilization of the facilities.

The utilization of the apparent excess number of beds is attributed to the fact that the residents of large areas of southern Pennsylvania and northern West Virginia depend on these hospitals for service. Other factors are the education of the public to the use of the hospitals, the preference of the physicians to do their work in the hospitals, and the distance to other hospitals with comparable facilities. An indication of the acceptance of the hospitals by the public is the fact that 82.4% of all births in the County occurred in hospitals. Of the total number of births recorded per race, 82.6% to white parents and 72.7% to nonwhite parents occurred in hospitals.

The County is reasonably stable economically, being a trading and railroad center and having a diversity of industries and is, therefore, able to support its hospitals.

In view of these considerations, it was concluded that the utilization of the hospital facilities will continue at a high rate and probably increase. The existing hospitals are operating close to the highest point of occupancy at which satisfactory service can be maintained. There are a sufficient number of physicians practicing in the area to assure adequate medical service. With two schools training nurses, personnel of this type is reasonably available.

Allegany County qualifies as an intermediate area.

Recommendations

It is recommended that Allegany County be classified as an intermediate area.

In spite of the fact that the existing beds in this County are already in excess of the United States Public Health Service standards for the State, it is recommended that 75 beds be allocated to this area out of the pool, to be established as additions to either the Allegany Hospital or the Memorial Hospital, or divided between these hospitals.

The State has already set up funds for the addition of 20 beds at the Miners Hospital. When these beds are

constructed, they will be supplemental to the 75 recommended.

The Miners Hospital at Frostburg is the only State-owned general hospital in the State. It is recommended that after the building and renovation program is completed, a local nonprofit association be organized and that the title and responsibility for the operation of the hospital be transferred to it.

BALTIMORE BASE AREA

Baltimore City has for many years enjoyed the status of being the medical center for the State of Maryland and a large portion of the eastern United States. Due to the fact that medical facilities and personnel of preeminent caliber are available within Baltimore City, few hospitals have been established in the five counties near the City. These counties, Anne Arundel, Baltimore, Carroll, Howard, and Harford, are practically dependent on Baltimore City for hospital facilities with the exception of the Annapolis Emergency Hospital at Annapolis and the Harford Memorial Hospital at Havre de Grace; and since it fulfills the requirements for a base area as defined by the United States Public Health Service, the area consisting of Baltimore and the five counties has been classified as a base area.

Geographic considerations

The entire area comprises a logical single unit. It is free of travel barriers, such as mountains and rivers, which might obstruct a free flow of traffic to and from the City. The bodies of water which are located in the area have been spanned at convenient points by highway and railroad bridges.

All parts of the area are within a 25-mile radius of Baltimore City, with the exception of distant sections of the counties.

Population

The population of this area increased from 931,413 in 1920 to 1,310,265 in 1945, or 40.7%. Table O shows the population at five dates for which data are available.

Population figures supplied by the Bureau of Vital Statistics of the Maryland State Department of Health, for November 1, 1945, are identical with the estimates made by the United States Bureau of the Census on November 1, 1943, the only differential being in Baltimore City and St. Mary's County. For Baltimore, the population as of November 1, 1943 was reported as 927,941, and as of November 1, 1945 as 930,000.

All subdivisions included in the Baltimore Base Area experienced steady increases in population, between 1920 and 1945, Baltimore County leading with a 170.6% increase.

The most recent population statistics available on the distribution of the population within the subdivisions is contained in the 1940 U. S. Census. In an area where the population is static, these figures might be ac-

cepted; but with an 11.6% increase in population from 1940 to 1945 for the Area as a whole, some further study is necessary.

The greatest concentration of population outside Baltimore City is in those election districts contiguous to the City. No statistical records since 1940 are available to indicate where the population increases have occurred. It was assumed that most of the new residents settled in the industrial areas. There is a great concentration of people in the Sparrows Point-Essex-Middle River area. The next largest center is in the Catonsville area. Other concentrations exist in the neighborhoods of Towson, Havre de Grace, Bel Air, and Annapolis. On the basis of the 1943 estimate, the population per square mile was calculated as follows:

	Land Area in Square Miles	Population per Square Mile 1943
Baltimore City.....	79	11,746.1
Anne Arundel County.....	417	184.8
Baltimore County.....	610	331.8
Carroll County.....	456	86.4
Harford County.....	448	95.7
Howard County.....	251	73.6
Baltimore Base Area	2,261	578.6

The distribution of population by race in 1940 and 1945 was noted as follows:

	1940		
	Total	White	Nonwhite
Baltimore City.....	859,100	692,705	166,395
Anne Arundel County	68,375	50,524	17,851
Baltimore County.....	155,825	145,295	10,530
Carroll County.....	39,054	36,973	2,081
Harford County.....	35,060	31,076	3,984
Howard County.....	17,175	15,369	2,806
Baltimore Base Area	1,174,589	970,942	203,647
	1945		
	Total	White	Nonwhite
Baltimore City.....	930,000	751,000	179,000
Anne Arundel County	77,070	56,955	20,115
Baltimore County	202,425	188,660	13,765
Carroll County.....	39,399	37,311	2,088
Harford County.....	42,890	38,001	4,889
Howard County.....	18,481	15,469	3,012
Baltimore Base Area	1,310,365	1,087,396	222,869

According to these data 17.0% of the population of the Baltimore Base Area was nonwhite, as of 1945.

Transportation, commerce, and industry

Baltimore is the most important city in the State and is, therefore, the commercial and industrial center of the Baltimore Base Area.

TABLE O: BALTIMORE BASE AREA, POPULATION TRENDS, 1920-1945

COUNTY	1945 ¹	1943 ²	1940 ³	1930 ³	1920 ³	PER CENT CHANGE 1943-1945	PER CENT CHANGE 1940-1943	PER CENT CHANGE 1930-1940	PER CENT CHANGE 1920-1930	PER CENT CHANGE 1920-1945
Baltimore City.....	930,000	927,941	859,100	804,874	733,826	0.2	8.0	6.7	9.7	26.7
Anne Arundel.....	77,070	77,070	68,375	55,167	43,408	—	12.7	23.9	27.1	77.5
Baltimore.....	202,425	202,425	155,825	124,565	74,817	—	29.9	25.1	66.5	170.6
Carroll.....	39,399	39,399	39,054	35,978	34,245	—	0.9	8.5	5.1	15.1
Harford.....	42,890	42,890	35,060	31,603	29,291	—	22.3	10.9	7.9	46.4
Howard.....	18,481	18,481	17,175	16,169	15,826	—	7.6	6.2	2.2	16.8
AREA TOTALS.....	1,310,265	1,308,206	1,174,589	1,068,356	931,413	0.2	11.4	9.9	14.7	40.7

¹Maryland State Department of Health, Bureau of Vital Statistics. These population estimates are the same as the 1943 Bureau of the Census estimates except for Baltimore City.

²United States Bureau of the Census, Estimated Civilian Population, 1943.

³United States Bureau of the Census, 16th Census of the United States, 1940.

Most of the industries of the area are located in Greater Baltimore, which includes portions of the adjoining counties. The majority of people are employed in manufacturing, commerce, transportation, and shipping occupations. While large numbers of residents of the area commute between their homes and their place of employment, many of those in the outlying districts engage in farming.

Baltimore serves as an important marketing and export and import center for a large portion of the eastern United States.

With the industrial and commercial importance of the City, there has been developed a network of highways and railroads which converge in Baltimore.

The diversity of the types of employment available differentiates this area from one where the economic welfare of the community is dependent on one industry, with the prosperity of the community rising and falling with the rate of operation of that industry.

GENERAL HOSPITAL FACILITIES

The general hospitals of the State are listed in Table G. Those located in the Baltimore Base Area are as follows:

	NORMAL BED CAPACITY		
	White	Nonwhite	Total
Anne Arundel County			
Annapolis Emergency Hospital ..	58	12	70
Baltimore County			
No general hospitals	0	0	0
Carroll County			
No general hospitals	0	0	0
Harford County			
Fountain Green Hospital, Bel Air ..	17	0	17
Harford Memorial Hospital,			
Havre de Grace.....	61	11	72
Howard County			
No general hospitals	0	0	0
Baltimore City			
18 institutions.....	4,104	498	4,602
TOTALS	4,240	521	4,761

Table M shows that the per cent occupancy for the hospitals in Baltimore City is 74.2%. The occupancy rate is high in all except the Baltimore City Hospitals, Franklin Square Hospital, Sydenham Hospital, and the Volunteers of America Hospital. At the time of the survey, Baltimore City Hospitals and Franklin Square Hospital had some departments closed due to shortages of personnel.

Flow of patients to hospitals in Baltimore City

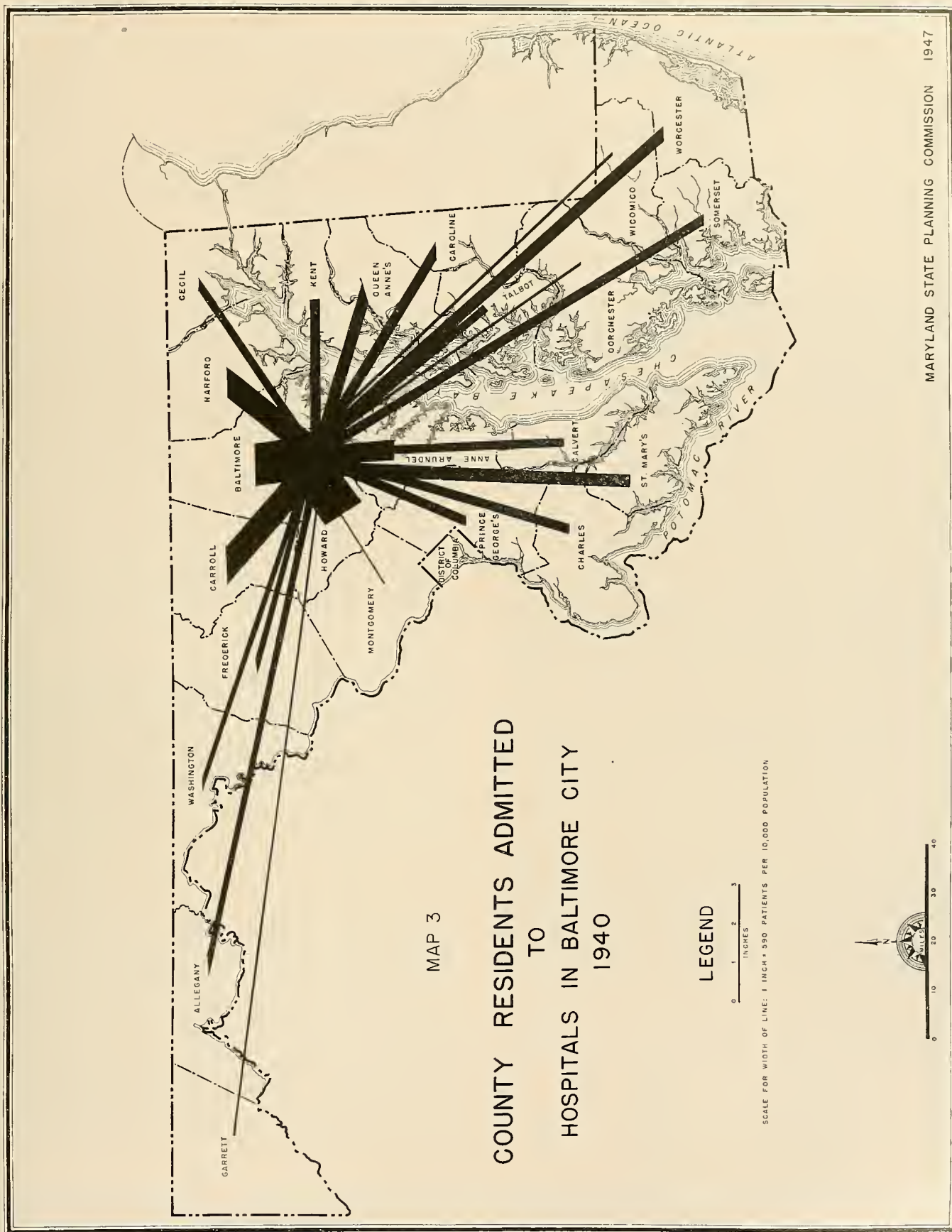
Table N, showing the distribution of patients by place of residence, is a tabulation of data supplied by the hospitals. Unfortunately, few hospitals keep a routine record of these data. Some ran test studies or estimated the distribution, while others supplied no information on the question.

The distribution in Table N, therefore, cannot be considered complete. It did supply a sufficient amount of information to indicate the trends or direction of travel of people seeking hospital care.

This compilation is given weight because of its consistency with the data compiled during the survey of medical care in the counties.¹ The information, with relation to travel of people to Baltimore City for hospital care, gathered during the previous survey was illustrated on a map which is reproduced herein (Map 3).

It is quite apparent from Table N and Map 3 that patients travel from all parts of the State to Baltimore City for hospital care and that the people of Anne Arundel, Baltimore, Carroll, Harford, and Howard counties are especially dependent in this way.

¹Medical Care in the Counties of Maryland, Maryland State Planning Commission, April 1944.



ANNE ARUNDEL COUNTY

BALTIMORE BASE AREA

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 77,070	8,695 increase	77.5% increase
1940: 68,375	13,208 increase	57.5% increase
1930: 55,167	11,759 increase	27.1% increase
1920: 43,408		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 20,115	26.1	1945: \$852.67
1940: 17,851	26.1	1940: \$472.06
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
19.1%	63.5%	17.3%
<i>Land area: 417 square miles</i>		
<i>Population per square mile, 1943: 184.8</i>		
<i>County seat: Annapolis</i>		
	<i>Population</i>	1940: 13,069 1930: 12,531
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
66.7	78.6	27.9
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Annapolis Emergency Hospital	Annapolis	70

Geographic considerations

Anne Arundel County lies south of Baltimore City. It is bounded on the north by Baltimore City and Baltimore County, on the west by Howard and Prince George's counties, on the south by Calvert County, and on the east by the Chesapeake Bay.

It has 417 square miles of land area, making it the thirteenth county in the State in size. The land is generally flat with some rolling hills. There are numerous rivers and bays opening into the Chesapeake Bay, which are the base of the resort and fishing industries.

Population

Its population in 1943 was 77,070. On this basis, the density of the population was 184.8 persons per square mile, placing it fifth among the counties of the State in this respect. The County experienced a population increase of 77.5% between 1920 and 1943.

In 1945 there were 20,115 nonwhite residents of the County, representing 26.1% of the County's population.

The election districts, as of 1940, had the following populations:

District 1.....	4,304
District 2.....	13,168
District 3.....	10,938
District 4.....	10,932
District 5.....	11,735
District 6.....	13,069
District 7.....	1,895
District 8.....	2,334

Districts 2, 3, 4, 5, and 6, located in the area between Baltimore and Annapolis, account for approximately 88% of the County's population.

As of 1940, the County's population was 19.1% urban, 63.5% rural nonfarm, and 17.3% rural farm.

Transportation

Highways traverse the County in all directions. The Governor Ritchie Highway, a modern dual highway between Annapolis and Baltimore City, places the two cities within easy traveling distance of each other.

The ferry to the Eastern Shore has its western terminus at Sandy Point, near Annapolis. This ferry is one of the main links between the Eastern and Western Shores.

Railroad service is available to practically all parts of the County.

Industry and commerce

The State Capital and the United States Naval Academy are located at Annapolis, both of which contribute to its commercial importance.

The County is largely dependent on farming, fishing, and summer resort trade. Some residents are engaged in shipbuilding, while others are employed at a fertilizer plant and a lumber company.

The per capita income in 1940 was \$472.06, making it the fifteenth county in the State in this respect. In 1945 the per capita income was \$852.67, again making it fifteenth in the State.

Physicians

There are 42 physicians practicing in Anne Arundel County. This establishes a ratio of one physician to every 1,835 people.

They are distributed as follows:

Annapolis.....	18	Crownsville	1
Glen Burnie.....	6	Lothian.....	1
East Port.....	2	Gambrills.....	1
Linthicum Heights.....	2	West River.....	1
Pasadena.....	3	Millersville.....	1
Elkridge.....	1	Odenton.....	1
Brooklyn.....	4		

They are engaged in the following types of practice:

General.....	37	Eye, ear, nose, and	
Surgery.....	1	throat.....	2
Pediatrics	1	Psychiatry.....	1

GENERAL HOSPITAL FACILITIES

ANNAPOLIS EMERGENCY HOSPITAL

The Annapolis Emergency Hospital, located in Annapolis, is operated by a nonprofit association. The Board of Trustees is made up of local citizens who are elected to membership for terms of three years.

The hospital has full approval of the American College of Surgeons.

Area served: Forty-six per cent of the patients treated are from Annapolis and 50% are from the rest of Anne Arundel County.

Buildings: The buildings are of fire-resistant construction. The original buildings were constructed in 1902. The newest addition was constructed in 1929.

Bed capacity: This hospital has a normal capacity of 70 beds, 12 of which are reserved for nonwhite patients.

Utilization: Its beds are used at 62.0% of capacity, furnishing 226.3 days of service per bed per year. The average length of stay per patient is 7.5 days.

An analysis of service rendered shows the following:

	Number of patients	Per cent
Medical	459	21.7
Surgical	878	41.5
Obstetric	471	22.2
Pediatric	184	8.7
Other	126	5.9
TOTALS.....	2,118	100.0

These proportions show a satisfactory balance between services; however, the number of medical and obstetric patients might be expected to increase if

more beds were made available and nonwhite patients admitted for obstetric care.

Educational activities: There is no organized educational program in any of the branches of training.

UNITED STATES NAVAL HOSPITAL

The United States Naval Hospital, located on the grounds of the United States Naval Academy, renders service to Naval personnel and their families in the vicinity. Although it is not generally available to the population, it reduces the patient load at the Annapolis Emergency Hospital.

Conclusions

If Annapolis were located in an isolated area, it would be in urgent need of more beds; but with its proximity to Baltimore City, its need, while existent, is not acute. Because of its relative position to Baltimore City and Washington, Anne Arundel County hospital needs were determined to be comparable to those of a rural area. On this basis, 2.5 beds per 1,000 population, as of 1943, would require an allocation of 193 beds to Anne Arundel County.

The Annapolis Emergency Hospital has not reported any planned expansion. However, in light of the population served, more beds are needed. The need calculated above would furnish more beds than are necessary. An addition of approximately 40 beds, bringing the total to 110, would meet the needs as now projected.

The Annapolis Emergency Hospital does not admit nonwhite obstetric patients. The only facilities for such care are those maintained by Dr. Johnson in a three-bed private hospital in Annapolis.

Birth records show that 66.7% of all births in this County occur in hospitals: 78.6% of all white births take place in hospitals; whereas, only 27.9% of all nonwhite births are in hospitals.

Recommendations

Because of its geographic relationship to Baltimore City and the dependence of its residents on the City's hospital facilities, it is recommended that Anne Arundel County be included in the Baltimore Base Area.

It is recommended that, when beds are allocated to specific institutions within the Baltimore Base Area, a construction program for the addition of 40 beds to the Annapolis Emergency Hospital be given favorable consideration.

BALTIMORE CITY

BALTIMORE BASE AREA

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1945: 930,000	2,059 increase	26.7% increase
1943: 927,941	68,841 increase	26.5% increase
1940: 859,100	54,226 increase	17.1% increase
1930: 804,874	71,048 increase	9.7% increase
1920: 733,826		

<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income for Baltimore City and Baltimore County</i>
1945: 179,000	19.2	1945: \$1,548.12
1940: 166,395	19.4	1940: \$ 725.02

Land area: 79 square miles

Population per square mile, 1943: 11,746.1

Births in hospitals as per cent of total births, 1945

<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
81.9	88.2	63.5

General hospital facilities: 23 institutions (See Table P)

Geographic considerations

Baltimore City is bounded by Baltimore County on three sides. A small portion of its southern boundary is common with Anne Arundel County. It fronts on the Patapsco River, which opens into the Chesapeake Bay.

Its land area is 79 square miles. Almost the entire area is improved, being occupied by residences, commercial institutions, and industries.

The state is generally divided into three large sections: the Eastern Shore; the Western Shore, which includes Southern Maryland and the Baltimore Metropolitan Area; and Western Maryland. Baltimore City is located at the focus of these areas.

Washington lies forty miles to the southwest and Philadelphia ninety miles to the northeast.

Population

Between 1920 and 1945 the population of Baltimore City increased by 196,174, or 26.7%. Consideration must be given the increase in population in the counties surrounding the City in order to make a determination of the increase in demand on the facilities within the City. It is for this reason that the five surrounding counties have been included with Baltimore City in the Baltimore Base Area.

The nonwhite population of Baltimore City, numbering 179,000, was 19.2% of the total in 1945. In 1940 it represented 19.4% of the total.

Transportation

Baltimore City, being an important seaport and commercial and industrial center, is accessible by every type of transportation from not only the surrounding counties but the entire State.

Industry and commerce

The data available on the per capita income for Baltimore City was combined with that of Baltimore

County. It was \$1,548.12 in 1945 as compared with \$725.02 in 1940.

The following is excerpted from a release by the Baltimore Association of Commerce, May 1947.

Baltimore, the country's sixth city in population and second seaport in foreign-trade tonnage, is one of the principal industrial and maritime centers of the United States. With a metropolitan population of over 1,200,000 persons, Baltimore also handles a large volume of wholesale and retail trade. In addition to its industrial, shipping, and commercial activities, Baltimore is an important banking and financial community and is a recognized leader in the writing of casualty insurance and fidelity and surety bonds. As the metropolis of Maryland, Baltimore is the principal factor in the business life of the State.

By virtue of its central position on the Atlantic seaboard, Baltimore is conveniently situated with respect to the principal world markets and sources of raw materials. These fundamental advantages, together with the development of Baltimore's great natural harbor, the availability of superior transportation facilities, and the existence of short-line rail connections to the interior of the United States, established the basis for the city's remarkable business expansion during the last three or four decades.

Baltimore has a highly diversified industrial structure with no one industry or single group of industries occupying a dominant position. As a result of the city's growth along many different lines, general business conditions in Baltimore have been relatively more stable than those in almost any other large industrial city in America.

Practically all types of consumers' goods, including foodstuffs, clothing and accessories, shoes, hats, furniture, housefurnishings, silverware, books and magazines, handbags, luggage, cosmetics, jewelry, and umbrellas, are made in Baltimore. In addition, the community produces a large number of basic and specialized products, such as chemicals, colors and pigments, fertilizers, refined petroleum, iron and steel products, soaps, insulated wire and cable, aircraft, ships and yachts, motor vehicles, refined copper, biological and pharmaceutical products, meteorological and scientific instruments, portable electric tools, radios, bottle closures, textile-mill products, metal and glass containers, and numerous others.

Of the 280 separate industries listed for Maryland in the 1939 Census of Manufactures, all but 31 were rep-

resented in Baltimore and vicinity. A total of 145 industries, or slightly over half the number given for the State were concentrated entirely in the Baltimore area. The localization of a very large part of Maryland's manufacturing industry in and around Baltimore is due primarily to the community's outstanding advantages as a location for many different kinds of industrial operations.

In December 1946, the approximately 2,000 manufacturing establishments in the Baltimore Industrial Area (Baltimore City and Baltimore County) employed a total of 188,215 workers, and the aggregate value of their production last year was estimated at around two billion dollars. The combined expenditures for materials, fuel, power and supplies for use in manufacture were well over a billion dollars, while the total outlay for wages and salaries exceeded four hundred million dollars.

For over two hundred years Baltimore has served as an international seaport. Its great natural harbor, which has about forty miles of deep water frontage, is the city's chief commercial asset. The development of the port also has been an important factor in the growth of the community's manufacturing industry. Many large concerns which require waterside factory sites operate extensive facilities along the Baltimore waterfront, making it one of the most important industrial harbors in the United States.

The banks and investment houses of Baltimore have played an important part in the community's economic progress. From the beginning of the city's export and import trade, early in the eighteenth century, to the founding of the Baltimore and Ohio Railroad in 1827, and ever since, the business leaders of Baltimore have demonstrated their resourcefulness in financing sound business enterprises. Many important manufacturing, merchandising, transportation, and mining concerns have been organized and financed here.

Baltimore's location, favorable with respect to economic land and water transportation, has enabled the city to become one of the principal wholesaling and jobbing markets in the country. In 1939, the most recent year for which official records are obtainable, the city had a total of 1,664 wholesale establishments, including full- and limited-function wholesalers, manufacturers' branches, agents, brokers, etc. The estimated volume of sales in 1945, according to the magazine "Sales Management," amounted to \$1,440,671,000. The local wholesale houses at the close of 1946 afforded employment to approximately 25,000 workers.

The principal commodities distributed by Baltimore wholesalers include automotive parts and equipment; clothing and furnishings; electrical goods; farm products; groceries and food specialties; lumber and construction materials; dry goods and general merchandise; beer, wines, and liquors; paper and paper products; machinery and supplies; and tobacco products.

The approximately 15,000 retail stores located in Baltimore had an aggregate sales volume in 1945 of \$870,147,000 according to an estimate prepared by "Sales Management." This figure was more than double the dollar value reported by the U. S. Census Bureau for the year 1939. Concentrated largely in the central business district and in some 70 neighborhood shopping centers, the city's retail outlets in December 1946 employed about 75,000 workers.

Due to its great economic importance, as well as to its

central location with respect to other parts of the State, Baltimore has developed close business and social ties with every section of Maryland. Not only do many of the industrial and commercial establishments of Baltimore market their products throughout the State, but the city is, in turn, a large consumer of the products of Maryland's farms, mines, forests, and fisheries. Many manufacturing concerns in the counties, likewise, market a part of their production in Baltimore. In addition, the county areas send considerable volume of merchandise and other commodities to Baltimore for transshipment. The city's relationship to the rest of the State is further strengthened by the fact that many Federal and State Bureaus and departments with jurisdiction throughout Maryland maintain their headquarters in Baltimore.

GENERAL HOSPITAL FACILITIES

Twenty-one general hospitals are located in the Baltimore Base Area, and eighteen are within the City (Table G). Only one of the general hospitals within the City has less than 100 beds. Their total normal bed capacity is 4,104 for white patients and 498 for nonwhite patients. The Baltimore City Hospitals, with 513 general hospital beds, admits nonwhite patients but does not reserve separate facilities for them.

While the population of Baltimore City has increased by 196,174 persons, or 26.7% since 1920, and the entire area is highly developed, it cannot be assumed that the medical service needs are approaching a static level. The important increment in population, in the areas surrounding the City, is almost entirely dependent upon the facilities of the City for such service.

The combined bed facilities of all the hospitals include every type of service (Table P).

HOSPITAL FACILITIES EXISTING AND PROPOSED

Combining the general hospitals with the acute special hospitals, Baltimore City has 4,320 general hospital beds for white patients and 539 for nonwhite patients, or a total normal bed capacity of 4,859 beds. At 4.5 beds per 1,000 population as of 1943, Baltimore City should have 4,176 general hospital beds.

If Baltimore City were considered as an independent area, it would have an excess of 683 beds above the United States Public Health Service standards. However this excess in Baltimore City is utilized by the residents of Howard, Harford, Carroll, Baltimore, and Anne Arundel counties who depend largely on Baltimore City for hospital service.

The existing and recommended facilities of the counties included in the Baltimore Base Area are treated

TABLE P: GENERAL AND SPECIAL HOSPITALS OF BALTIMORE CITY, BED COMPLEMENT BY TYPE OF SERVICE

NAME OF INSTITUTION	MEDICAL	SURGICAL	OBSTETRIC	PEDIATRIC	CONTAGIOUS	TUBERCULOSIS	NERVOUS AND MENTAL	CHRONIC	CONVALESCENT	ORTHOPEDIC	EYE, EAR, NOSE, AND THROAT	SKIN AND CANCER	VENEREAL DISEASE	AGED	OTHER	TOTALS
Baltimore City Hospitals	117	173	98	60	—	280	—	451	—	—	—	—	60	705	—	1,949
Baltimore Eye, Ear, and Throat Charity	—	—	—	—	—	—	—	—	—	—	65	—	—	—	—	65
Beck Diagnostic Clinic	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14
Bon Secours Hospital	—	—	25	21	—	—	—	—	—	—	—	—	—	—	96	142
Children's Hospital School	—	—	—	—	—	—	—	—	—	130	—	—	—	—	—	130
Church Home and Hospital	—	—	25	—	—	—	—	—	—	—	—	—	—	—	140	165
Doctor's Hospital	—	—	8	—	—	—	—	—	—	—	—	—	—	—	—	8
Franklin Square Hospital	30	65	50	8	—	—	—	—	—	10	10	—	—	—	29	202
Hospital for Women of Maryland	—	—	38	—	—	—	—	—	—	—	—	—	—	—	86	124
Johns Hopkins Hospital	245	310	144	121	16	—	87	—	—	—	80	—	60	—	8	1,071
Maryland General Hospital	—	—	26	29	—	—	—	—	—	—	—	—	—	—	187	242
Mercy Hospital	62	91	45	35	3	—	—	—	—	—	17	—	—	—	34	287
Presbyterian Eye, Ear, and Throat, Hospital	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	40
Provident Hospital	22	37	20	14	—	—	—	—	—	—	—	—	—	—	32	125
St. Agnes Hospital	—	—	31	22	—	—	—	—	—	—	—	—	—	—	168	221
St. Joseph's Hospital	20	52	32	33	—	—	—	—	—	10	3	—	—	—	100	250
Sinai Hospital	31	40	48	28	—	—	—	—	—	—	—	—	—	—	153	300
South Baltimore General Hospital	8	97	24	21	—	—	—	—	—	—	—	—	—	—	—	150
Sydenham Hospital	—	—	—	—	100	—	—	—	—	—	—	—	—	—	—	100
Union Memorial Hospital	—	—	35	51	—	—	—	—	—	—	—	—	—	—	255	341
Volunteers of America Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	40
West Baltimore General Hospital	—	—	35	20	—	—	—	—	—	—	—	—	—	—	131	186
University Hospital	70	104	66	34	—	—	—	—	—	—	—	—	—	—	161	435
TOTALS	619 ¹	974	750 ¹	497	119	280 ²	87 ³	451 ⁴	—	150 ¹	215 ¹	—	120	705 ⁵	1,620	6,587
NUMBER OF INSTITUTIONS HAVING DEPARTMENTS	10	9	17	14	3	1	1	1	—	3	6	—	2	1	15	

¹Some of these were placed in totals with special hospitals.²Placed in totals with tuberculosis hospitals.³Placed in totals with mental hospitals.⁴Placed in totals with chronic disease hospitals and nursing homes.⁵Only domiciliary care provided.

in the discussion of the individual counties. With the addition of these facilities to the Baltimore City totals, the resultant figures for the Baltimore Base Area are:

	White	Nonwhite	Total
Baltimore City	4,104	498	4,602
Anne Arundel County	88	22	110 ¹
Carroll County (Westminster)	50	0	50 ¹
Harford County	108	11	119 ¹
Total general hospital beds	4,350	531	4,881
Special (acute) hospitals ²	101	26	127
	4,451	557	5,008
Less beds in nonacceptable hospitals	144	34	178
Total beds	4,307	523	4,830

Applying the standard of 4.5 beds per 1,000 population to the combined population for the Baltimore Base Area, which was 1,308,206 as of 1943, 5,887 general hospital beds are established as the need. In the light of the dependence of the entire State on Baltimore City, the Committee allocated to the Baltimore Base Area 385 additional beds from the pool, bringing the quota for the Area to 6,272. With 4,830 acceptable beds in existence and recommended, there is a deficiency of 1,442 beds in Baltimore City.

ALLOTMENT OF BEDS

Having established the need at 1,442 after recommendation for the counties included in the area, the next problem was the allotting of these beds.

¹Includes recommended beds.²The Children's Hospital School, listed with special hospitals in Table K, was transferred to the category of chronic disease hospitals.

PROVIDENT HOSPITAL

Provident Hospital, which is organized, operated, and staffed by nonwhite persons, was considered the logical beginning point for racial assignment of beds.

This hospital holds approval by the American College of Surgeons. It is approved for interne training and residencies in surgery and obstetrics, as well as for a general residency. It has an approved school of nursing, the only one in Maryland for training of Negro nurses for State registration.

It is well organized in all departments, including an outpatient service. The physicians in charge of the X-ray department and clinical laboratory do not limit their practice to these fields; but with a larger hospital these deficiencies might be corrected. Other departments, such as dietary, pharmacy, medical records, medical social service, and nursing school, are under the supervision of well-trained people. Consulting service is utilized in most of the specialties.

In addition to the main hospital building, which was originally used by what is now the Union Memorial Hospital, several adjoining row houses have been remodeled and are utilized for nurses' quarters, teaching areas, and the outpatient department.

The land area, occupied by the hospital and other buildings owned by the hospital, is 30,756 square feet, which with the necessary demolition of some of the row houses and the acquisition of a plot now proposed would supply minimal space for additional buildings.

The hospital is located in one of the two areas of Negro population concentration.

Its normal capacity is 125 beds. The utilization rate of these beds is 78.1%, which is relatively high.

Present projected plans include modernization of the existing hospital, a new nurses' home, and replacements and increased capacity in the laundry and power house, along with the addition of 50 to 75 beds. The beds are planned to be used for pediatric, obstetric, and general service.

With the acute need for beds for the care of nonwhite patients specifications should call for a capacity of 250 beds. It can be expected that this hospital eventually will need more than the 50 additional beds now projected.

If funds can be located sufficient to meet two thirds of the cost of construction and necessary replacements, allocation of matching Federal funds is recommended for the project under consideration which will add 50 beds to the present capacity.

BUILDING PLANS OF OTHER HOSPITALS

In making plans for the expansion of hospital facilities, proposed building plans were weighed against the established needs. Reports by the general hospitals of Baltimore on their projected building plans were reviewed.

Seven nonprofit general hospitals, which admit white and nonwhite patients, have under consideration plans for expansion. The Franklin Square Hospital project is located in the western area; Johns Hopkins Hospital is in the eastern area; South Baltimore General Hospital is in the southern district. St. Joseph's new location in Loch Raven will be in the north and convenient to Towson. Maryland General Hospital, University Hospital, and Mercy Hospital are in the center of the City.

If construction follows figures being considered at present, 857 new general hospital beds will be added within Baltimore City, including the new St. Joseph's Hospital. If ratios of 17% for nonwhite patients are observed, 744 of these beds will be assigned for white patients and 113 for nonwhite patients (Table Q).

Within the Baltimore Base Area, several planned expansions were reported which, for various reasons, were not considered as being eligible for financial assistance at this time under the general hospitals phase of the program.

West Baltimore General Hospital plans remodeling and expansion of its operating rooms suite, X-ray department, and an addition of 20 beds.

The hospital is strategically located, serving the West Baltimore residential area and Catonsville. This expansion is a continuation of a program under which a new wing to the hospital and a new nurses' home have already been added. It is set up well organizationally and has well-qualified heads in most departments.

While it holds an important place in the hospital picture, it cannot be considered for a grant under the Hospital Survey and Construction Act because of its policy against the admission of nonwhite patients. If its policy is changed to comply with the Act, the Hospital could be included in the program.

The Baltimore Eye, Ear, and Throat Charity Hospital, located at 1214 Eutaw Place, has under consideration plans for an addition to its laboratories, X-ray department, laundry, and hospital records area. This hospital is rendering valuable service to inpatients and clinic patients. Its present buildings are remodeled row houses which do not lend themselves well to hospital purposes. They present a fire hazard which would be increased with the addition of more space.

In line with the established policy of excluding from the program any institution maintaining a building which is partially used for other than hospital or clinic purposes, this institution is excluded. Also, in line with the present generally accepted policy of concentrating all types of service in large general hospitals, this hospital is eliminated on account of its size. This decision is no reflection on the quality of work done nor the ability of the medical staff, but is made in the interest of safety and efficiency.

St. Agnes Hospital, located at Wilkens and Caton Avenues, on the western edge of the City, plans to add 100 beds to its obstetric and pediatric departments. It also plans an addition to its nurses' home.

TABLE Q: PROPOSED CONSTRUCTION AT NONPROFIT GENERAL HOSPITALS AVAILABLE TO NONWHITE PATIENTS, BALTIMORE CITY

NAME OF INSTITUTION	NORMAL BED CAPACITY			RACIAL ASSIGNMENT OF BEDS TO BE ADDED (17% NONWHITE)			ESTIMATED COST	FUNDS ON HAND
	White	Nonwhite	Total	White	Nonwhite	Total		
Franklin Square Hospital.....	158	15	173	75	15	90	\$1,000,000	—
Johns Hopkins Hospital.....	656	217	873	200 ²	0 ²	200 ²	3,000,000 to 5,000,000	\$1,750,000
Maryland General Hospital.....	228	7	235	76	16	92	1,000,000	900,000
Mercy Hospital.....	256	25	281	124	26	150	1,000,000	—
St. Joseph's Hospital ¹	230	20	250	124	26	150	—	Owns 43 acres in Loch Raven district 100,000
South Baltimore General Hospital.....	127	8	135	21	4	25	250,000	—
University Hospital.....	354	81	435	124	26	150	800,000	—
TOTAL BEDS.....	2,009	373	2,382	744	113	857		

¹Present plans at St. Joseph's Hospital call for erection of a 400-bed hospital at new location, making net increase 150.

²Johns Hopkins Hospital already has 24.9% of its beds reserved for nonwhite patients. The addition of 200 beds would reduce this percentage to 20.2%.

This hospital in recent years has completed remodeling and renovating projects in its dispensary and accident division, operating rooms, and pediatric department. The buildings are old but well constructed and have been kept in a good state of repair.

Its bed complement is 37 beds in excess of its normal capacity. The per cent of occupancy based on normal capacity is 98.9%.

In line with industrial development in this section, extensive home building operations are in progress in the area served by the hospital. It can be expected that St. Agnes Hospital, being located nearest this development, will be utilized to a great extent by the new residents.

With its present high rate of occupancy and the expected increase in the population of the service area, need for more beds is indicated clearly. However, owing to its policy of not admitting nonwhite patients, this hospital cannot be considered for a grant under the Hospital Survey and Construction Act.

This hospital is of more than ordinary importance to the community because of its proximity to and administrative and functional coalition with the Jenkins Memorial, whose function is the care of chronic and incurable patients.

It is an important part of the hospital facilities of the City and should be encouraged to expand its facilities to meet the present and the apparent future increased demand.

The Church Home and Hospital, located at Broadway and Fairmount Avenue, has under consideration a project for the addition of 90 beds.

This hospital is located in a densely populated area and is operating at a rate of occupancy of 81.0%. Some parts of the institution are quite old, but newer additions are fairly modern.

Operating under a policy which does not permit the admission of nonwhite patients, this hospital cannot qualify for a grant of Federal funds under this program. Located as it is in an area with a large Negro population, it would seem logical that this hospital make some service available for Negroes. However, this body has no authority with regard to policies of the individual hospitals; these prerogatives rest with the boards of the hospitals. The observation made above is rendered in the light of existing conditions which might be used as justification of a change in policy, and which in turn would bring the projected expansion program within the scope of the Hospital Survey and Construction Act.

The Presbyterian Eye, Ear and Throat Hospital, located at 1017 East Baltimore Street, has a normal capacity of 40 beds. It conducts outpatient clinics in its specialties.

A letter from the President of the Board states that plans for a new hospital of the same bed capacity are under consideration, but are quite nebulous. Because of the age of the buildings now used and the inflammable nature of their construction, the opinion expressed by the President of the Board is correct in that an entirely

new building is the only program which should be considered.

Because of its limited field and its size, and since the plans are not at all crystallized nor funds yet available, this project was not recommended for consideration under the program.

The Sinai Hospital is in the process of preparing a construction program which, it is understood, will entail the vacating of the present building and the construction of a new hospital at a new site. It was reported by the Administrator that the new building will have a greater capacity than the present one. He also reported that the present policy opposed to the admission of nonwhite patients will be changed when the new hospital is put into service. Under the new policy, the Sinai Hospital would be included in this program. The bed capacity of the new hospital has not yet been determined.

The importance of the West Baltimore General Hospital, St. Agnes Hospital, Church Home and Hospital, and Sinai Hospital is emphasized because they conduct schools of nursing. With the present critical shortage of nurses, hospitals operating schools of nursing should be aided in every possible way because of their contribution to the over-all medical program. This is an additional reason for giving favorable consideration to their construction programs should they see fit to change their policies to qualify for assistance.

The completion of the seven programs, summarized in Table Q, along with the recommended additions at Provident Hospital, would leave the area 535 beds short of the allotted number. These beds would be assigned to other hospitals in the area as they develop construction programs in conformity with the regulations.

Conclusions

Baltimore City, with its hospitals serving not only its own residents but those of a large area surrounding it, is in need of more general hospital beds.

Building plans reported to be under consideration by hospitals in Baltimore City approximate the number considered to be needed.

Table Q lists the projects reported by hospitals which meet the basic requirements of the program. They are reasonable and could be favorably considered for grants of funds under this program; however, their listing does not constitute approval nor the granting of a specific priority.

Recommendations

It is recommended that Baltimore City, together with Anne Arundel, Baltimore, Carroll, Harford, and Howard counties, be considered as a base area.

It is recommended that hospitals in the Baltimore Base Area which have building programs under consideration be encouraged to crystallize their plans and to raise the necessary funds.

BALTIMORE COUNTY

BALTIMORE BASE AREA

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 202,425	46,600 increase	170.6% increase
1940: 155,825	31,260 increase	108.3% increase
1930: 124,565	49,748 increase	66.5% increase
1920: 74,817		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income for Baltimore City and Baltimore County</i>
1945: 13,765	6.8	1945: \$1,548.12
1940: 10,530	6.8	1940: \$ 725.02
Classification of residents for Baltimore City and Baltimore County, 1940		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
87.5%	10.1%	2.4%
<i>Land area: 610 square miles</i>		
<i>Population per square mile, 1943: 331.8</i>		
<i>County seat: Towson</i>	<i>Population 1940: 3,623</i>	
Births in hospitals as per cent of total births, 1945		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
80.3	82.6	54.8

Geographic considerations

Baltimore County is bounded by Pennsylvania on the north, by Carroll, Howard, and Anne Arundel counties and Baltimore City on the south, and by Harford County on the east.

It has 610 square miles of area, making it the third largest county in the State.

Population

The population of Baltimore County, as of 1943, was 202,425, which places it first among the counties in population. The phenomenal population increase of 170.6% within 23 years is attributed to the growth of industries in the City of Baltimore and the surrounding areas. The population density increased from 255.5 per square mile in 1940 to 331.8 per square mile in 1943.

The most recent data available on population distribution by election districts, as of 1940, are as follows:

District 1.....21,221	District 8..... 6,736
District 2..... 7,501	District 9.....21,641
District 3..... 7,150	District 10..... 2,448
District 4..... 7,596	District 11..... 7,225
District 5..... 2,121	District 12.....15,436
District 6..... 1,177	District 13.....13,366
District 7..... 3,385	District 14.....10,420
	District 15.....28,402

It will be noted that the population is concentrated in Election Districts 1 and 13, which lie southwest of the City of Baltimore, and Election Districts 9, 11, 12, 14, and 15, which lie east and north of the City.

It was assumed that the bulk of the 46,600 new

residents since 1940 have taken up residence in these areas.

Nonwhite persons, numbering 13,765, made up 6.8% of the County population in 1945.

Residents of Baltimore County, along with the residents of Baltimore City are 87.5% urban, 10.1% rural nonfarm, and 2.4% rural farm.

Transportation

The main lines of the Baltimore and Ohio Railroad and the Pennsylvania Railroad cross the southwest section of the County. Other railroads run north and northwest through the County. A network of roads makes travel to Baltimore City convenient.

Industry and commerce

Heavy industries are located in the Sparrows Point, Dundalk, and Middle River areas, offering employment to a large part of the population in these areas.

Since many residents of the County are employed in Baltimore City, both have been considered in the examination of per capita income. In 1940 the per capita income for the combined area was \$725.02. In 1945 it was \$1,548.12. In each of the years cited, this area had the highest income per capita in Maryland. The per capita income for the State in 1945 was \$1,291.61.

Physicians

There are 167 physicians residing in Baltimore County. The distribution of these physicians is as follows:

Catonsville	24	Arcadia (Upperco)	1
Towson	33	Parkton	1
Dundalk	13	Arbutus	2
Woodlawn	1	Baldwin	2
Parkville	4	Riderwood	1
Essex	7	Fork	1
Raspsburg	4	Timonium	1
Middle River	5	Randallstown	2
Halethorpe...	5	Relay	1
Overlea	2	Granite	1
Baltimore (suburbs)	12	Garrison	2
White Hall	1	Stoneleigh	2
Sparrows Point	8	Lutherville	1
Reisterstown	6	Sparks	6
Ruxton	2	Owings Mills	1
Pikesville	11	Lansdowne	1
Cockeysville	3		

According to the County's population in 1943, this establishes a ratio of one resident physician to every 1,212 persons.

GENERAL HOSPITAL FACILITIES

Baltimore County does not have a general hospital. The residents depend upon the hospitals in Baltimore City.

Conclusions

With transportation highly developed and with medical facilities and personnel of high caliber in Baltimore City, the continued dependence of Baltimore County on the City would be satisfactory if hospital facilities in the City are increased in proportion to the demand. Community hospitals in the

vicinity of Towson, Middle River, and Sparrows Point merit consideration only if the facilities of Baltimore are not increased to a sizable degree.

If application is made for a project in this area, supported by evidence of funds available for construction and demonstrated ability to support the hospital, it will be approved. If such application is approved, beds now allotted in Baltimore City will be assigned to such project. A hospital in this area should include quarters for the County Health Department.

Recommendations

St. Joseph's Hospital now owns land in the Loch Raven area and plans to erect a 400-bed hospital. This project is recommended. At the completion of this project, Towson will have access to adequate hospital facilities conveniently located.

A group of citizens in the Middle River area is giving serious consideration to the establishment of a hospital. Should their plans crystallize and sufficient funds be raised, their project will be considered for Federal funds in view of the population as shown in 1940 by election districts and the apparent increase in the intervening years. Any hospital in this area should include quarters for the County Health Department.

Due to its position as almost surrounding Baltimore City and the total dependence of its residents on the hospitals of Baltimore City for service, Baltimore County was included in the Baltimore Base Area.

CARROLL COUNTY

BALTIMORE BASE AREA

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 39,399	345 increase	15.1% increase
1940: 39,054	3,076 increase	14.0% increase
1930: 35,978	1,733 increase	5.1% increase
1920: 34,245		
<i>Nonwhite</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 2,088	5.3	1945: \$1,049.95
1940: 2,081	5.3	1940: \$ 520.25
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
12.0%	50.7%	37.3%
<i>Land area: 456 square miles</i>		
<i>Population per square mile, 1943: 86.4</i>		
<i>County seat: Westminster</i>		
	<i>Population</i>	1940: 4,692
		1930: 4,463
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
53.4	55.4	21.4

Geographic considerations

Carroll County is bounded on the north by Pennsylvania, on the west by Frederick County, on the south by Howard County, and on the east by Baltimore County. In this location, it makes up the northwestern section of the Baltimore Base Area.

It has 456 square miles of land area, making it the tenth county in the State in size.

The land is hilly, but most of it is tillable.

Population

The population of Carroll County, as of 1943, was 39,399. There has been a continuous but not very great increase in population from 1920 to 1943. During the 23-year period, it amounted to 15.1%. The population density in 1943 was 86.4 persons per square mile, making it tenth county in the State in this respect.

The population distribution, given by election districts for 1940, shows a rather even spread:

District 1, Taneytown.....	2,894
District 2, Uniontown.....	1,960
District 3, Myers.....	1,705
District 4, Woolerys.....	3,072
District 5, Freedom.....	6,538
District 6, Manchester.....	3,210
District 7, Westminster.....	8,588
District 8, Hampstead.....	2,529
District 9, Franklin.....	1,041
District 10, Middleburg.....	982
District 11, New Windsor.....	1,876
District 12, Union Bridge.....	1,446
District 13, Mount Airy.....	1,625
District 14, Berrett.....	1,588

The only incorporated communities with populations of more than 1,000 persons, as of 1940, are Westminster with 4,692 and Taneytown with 1,203.

In 1940, only 12.0% of the population was rated as urban, 50.7% was rural nonfarm, and 37.3% rural farm.

Nonwhite persons, numbering 2,088, made up 5.3% of the County's population in 1945.

Transportation

The County is bisected by one main highway, Route 140, which runs northwest from Baltimore City, through Westminster to Emmitsburg. Other secondary roads converge at Westminster, furnishing access to all points in the County and to Gettysburg and Hanover in Pennsylvania. The southern portion of the County is served by two highways, one running from Thurmont to Baltimore and the other from Frederick to Baltimore.

Bus service into Westminster is maintained by the Greyhound Lines, All-American Lines, and Blue Ridge Lines. The lines emanate from Baltimore City and serve the communities beyond Westminster.

The Western Maryland Railroad has three passenger trains into Westminster daily. These trains run into Hagerstown and Cumberland and make connections with the Pennsylvania Railroad into Frederick. Three trains make trips in the opposite direction daily.

Industry and commerce

There are no large industries in Carroll County. A number of small industries exist, including a cement plant, a shoe manufacturing plant, a floor-covering factory, a rubber manufacturing plant, and a machine factory.

The per capita income in 1940 was \$520.25. At that time, Carroll County was the tenth in the State from the standpoint of income.

The per capita income amounted to \$1,049.95 in 1945, and Carroll County fell to eleventh place among the counties of the State.

Physicians

Twenty-seven physicians are practicing in Carroll County and are distributed as follows:

Westminster.....	9	Union Bridge.....	3
Hampstead.....	4	New Windsor.....	2
Sykesville.....	3	Mount Airy.....	2
Taneytown.....	3	Manchester.....	1

On the basis of the County's population in 1943, this establishes a ratio of one physician to every 1,459 residents.

Three of these physicians have the privilege of treating patients in the Frederick City Hospital and one has such privilege in the hospital at Gettysburg, Pennsylvania.

GENERAL HOSPITAL FACILITIES

There are no general hospitals in Carroll County. Studies of patients in the hospitals of Frederick City and Baltimore City (Table N) indicate that residents of Carroll County use the hospitals in these two cities. It is reported by local people that some residents of the County travel to Hanover and York in Pennsylvania for hospital care.

At present a community group in Westminster is promoting actively a project for the establishment of a community health center. According to their plans, it is to be primarily a diagnostic center.

Conclusions

Carroll County has need for a general hospital. It should be located at Westminster, which is the County Seat, and is located at the approximate center of the County. It is accessible to all parts of the County and is the largest community in the County.

On the basis of United States Public Health Service standards for rural areas, of which Carroll County is typical, there is a need for a 100-bed general hospital. Because of the established practice of the residents to go outside the County for hospital care, a 100-bed hospital would exceed the current need until such time as the hospital is established definitely as the medical center for the County. The development of this hospital and staff will no doubt be slow because of its proximity to the specialists and facilities in Baltimore.

Recommendations

It is recommended that a hospital of at least 50-bed capacity be established in Carroll County. This hospital should be planned so that two later additions of 25 beds each can be made as the need develops.

With the small number of nonwhite residents in the County, it is not recommended that special facilities be set up for their care. On occasions, if the management chooses to practice segregation, they may do

so by providing private or semiprivate rooms.

In the absence of local hospital facilities and with a past record of dependence on the hospital facilities of Baltimore City, Carroll County was made a part of the Baltimore Base Area.

Should the contemplated diagnostic center be constructed prior to the construction of a general hospital, it is recommended that the center be designed so that it will serve as the nucleus for a hospital.

HARFORD COUNTY**BALTIMORE BASE AREA**

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 42,890	7,830 increase	46.4% increase
1940: 35,060	3,457 increase	19.7% increase
1930: 31,603	2,312 increase	7.9% increase
1920: 29,291		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 4,889	11.4	1945: \$818.82
1940: 3,984	11.4	1940: \$492.07
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
14.2%	44.9%	41.0%
<i>Land area: 448 square miles</i>		
<i>Population per square mile, 1943: 95.7</i>		
<i>County seat: Bel Air</i>	<i>Population 1940: 1,885</i>	
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
79.5	82.9	54.2
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Fountain Green Hospital	Bel Air	17
Harford Memorial Hospital	Havre de Grace	72

Geographic considerations

Harford County is bounded on the north by Pennsylvania, on the west by Baltimore County, on the south by Baltimore County and the Chesapeake Bay, and on the east by the Chesapeake Bay and the Susquehanna River. Across the River to the east is Cecil County. A portion of Baltimore County, approximately 10 miles wide, lies between the City of Baltimore and Harford County.

Harford County, with 448 square miles of land area, is the eleventh county in the State from this standpoint. The surface in the eastern portion is generally flat, but becomes hilly on the west and north.

Population

As of 1943, the County's population was 42,890. With 95.7 residents to the square mile, it stood seventh among the counties of the State.

The nonwhite population, 4,889 in 1945, constituted 11.4% of the County's population.

The population distribution by election districts, as 1940, was as follows:

District 1, Abington.....	5,782
District 2, Halls Cross Roads	6,828
District 3, Bel Air.....	7,800
District 4, Marshall.....	4,489
District 5, Dublin.....	5,194
District 6, Havre de Grace.....	4,967

As of 1940, the population was 14.2% urban, 44.9% rural nonfarm, and 41.0% rural farm.

Transportation

The main lines of the Baltimore and Ohio Railroad and the Pennsylvania Railroad, running between Washington, Baltimore, Philadelphia, and New York, cross Harford County.

Main highways between these cities also traverse the County. There are numerous secondary roads which give all parts of the County convenient access to Baltimore and Havre de Grace.

Industry and commerce

There are no large industries located in Harford County. The only manufacturing plant is located in Belcamp, where shoes and rubber overshoes are manufactured. Farming is practiced by a large segment of the population. Many residents are employed in Baltimore City and in the industries surrounding Baltimore.

The two trading centers are Bel Air and Havre de Grace.

In 1940 Harford County ranked eleventh county in the State in per capita income, which was \$492.07. As of 1945, the per capita income was \$818.82, making it the sixteenth county in the State in this respect.

Physicians

There are 28 physicians practicing in the County. They are distributed as follows:

Forest Hill.....	2	Churchville	1
Havre de Grace.....	6	Street.....	1
Cardiff.....	2	Fallston.....	1
Aberdeen.....	6	Edgewood.....	1
Darlington.....	2	Bel Air	6

This establishes a ratio of one physician to every 1,532 persons, based on the County's population in 1943.

GENERAL HOSPITAL FACILITIES

FOUNTAIN GREEN HOSPITAL

The Fountain Green Hospital, located near Bel Air, is a privately-owned institution with a capacity of 17 beds. The building was constructed fifty years ago and was originally used as a tavern. It is of frame construction.

Most of the patients are obstetric cases. A few medical and some ear, nose, and throat cases are admitted.

The occupancy rate is 39.6%. During the reporting year 144.5 days of service per bed were rendered. The average length of stay per patient was 9.9 days.

The physician who owns this hospital has the bulk of the patients as his private cases. Five other physicians have hospital privileges. One doctor travels from Baltimore to do ear, nose, and throat work.

Bel Air would be a logical geographic location for a hospital, being the center of the County. Since the Fountain Green Hospital is a privately-owned institution, no assistance can be given under the program. Even if it were operated as a nonprofit institution, no additional construction could be recommended owing to the inflammable nature of its construction.

HARFORD MEMORIAL HOSPITAL

The Harford Memorial Hospital is located at Havre de Grace. It is community-owned and operated on a nonprofit basis. This is a modern hospital, having been put into service in 1942, at which time the original hospital of frame construction was vacated. The hospital has provisional approval by the American College of Surgeons.

Area served: The patients are largely from the local community, the rest of Harford County, and Cecil

County, their distribution being 28.4%, 52.2%, and 15.5%, respectively. The out-of-state patients (3.9%) are accounted for by the fact that important highways connecting Washington, Baltimore, Philadelphia, and New York cross the Susquehanna River at this point. Thus there are people from all parts of the Nation funneling through this area.

Bed capacity: The normal capacity is 72 beds, of which 11 are set aside for nonwhite patients. On the basis of 1943 population in Harford County, the Harford Memorial Hospital has 1.7 beds per 1,000 population.

Utilization: This hospital operated at a rate of occupancy of 79.9%, rendering 291.5 days of service per bed at the time of the survey. The average length of stay per patient was 7.4 days.

An analysis of services by diagnosis showed the following:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	1,368	48.1
Surgical	428	15.1
Obstetric	608	21.4
Pediatric	321	11.3
Other	116	4.1
Totals	2,841	100.0

Medical staff: The Medical Staff is organized, having officers and standing committees. There are chiefs of service in obstetrics; surgery; pediatrics; anesthesia; ear, nose, and throat; and medicine.

The Active Staff has a membership of 15 physicians. Their ages range from 29 to 62 years, the average age being 40 years. Six of these men live in Havre de Grace. The others are located in near-by communities.

The membership of the Courtesy Staff includes seven physicians, whose ages range from 32 to 72 years. The average age is 47 years. The Consulting Staff is made up of 21 specialists from Baltimore City.

Qualifications for surgery and obstetrics are high.

Educational activities: The hospital has no educational program in effect.

Building plans: Active consideration is being given to plans for an addition which will increase the capacity by 20 beds.

Conclusions

The analysis of patients by diagnosis shows a broad acceptance of the Harford Memorial Hospital. A hospital where the work is preponderately surgical would indicate that only emergency cases and those which cannot possibly be taken care of in the home apply for care. This conclusion must be tempered with the fact that some of the major surgical work is referred to the hospitals of Baltimore.

The high occupancy rate and comparatively short average stay indicate a rapid turnover of patients due to an urgent need for beds.

In spite of this eccentric location on the east-central boundary of the County, most of the residents of the County travel to this hospital for care. Its construction was partially financed out of County tax funds,

making it a "County" hospital. There are no hospitals located west except Fountain Green Hospital.

The three election districts of Cecil County, across the Susquehanna River, look somewhat to this hospital for care, as indicated by the fact that 15.45% of the patients are residents of Cecil County.

When calculating the need, the residents of Cecil County were balanced off against those residents who it was assumed turned to Baltimore City for service.

Although Harford County was considered in this study as a part of the Baltimore Base Area, the standards for a rural area (2.5 beds per 1,000 population) were used in determining the number of beds necessary. On this basis its need was set at 107 beds.

Proposed plans call for the addition of 20 beds, which would bring the total to 92. This additional number of beds is conservative in view of the present rate of occupancy.

The addition of 30 beds instead would relieve the present excessive percentage of occupancy, and allow for some future increase in the utilization of the hospital. Unless new industries locate in the area or other changes occur affecting the population, it is assumed that the 102 beds will be adequate for some time in the future.

As of 1945, Harford County's nonwhite population was 11.4%. On this basis ten beds must be assigned to nonwhite patients, in order to keep beds available in proportion to population groups. Since there are already 11 beds reserved for nonwhite patients, all of the additional beds may be used for white patients.

Since Bel Air is located approximately halfway between Baltimore and Havre de Grace, about 16 miles away, and with adequate highways, it is felt that the facilities of Baltimore and Havre de Grace can serve the needs of this area.

Should more than the present limited funds become available and should the residents of Bel Air and the surrounding area become interested in financing a hospital, the project should be given serious consideration.

Recommendations

Because of its proximity to Baltimore City and its dependence to a large degree on the physicians of Baltimore City for medical care, Harford County was made a part of the Baltimore Base Area.

It is recommended that an addition of 30 beds be approved for the Harford Memorial Hospital at Havre de Grace.

HOWARD COUNTY

BALTIMORE BASE AREA

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 18,481	1,306 increase	16.8% increase
1940: 17,175	1,006 increase	8.5% increase
1930: 16,169	343 increase	2.2% increase
1920: 15,826		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 3,012	16.3	1945: \$861.70
1940: 2,806	16.3	1940: \$455.08
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
6.0%	61.3%	38.7%
<i>Land area: 251 square miles</i>		
<i>Population per square mile, 1943: 73.6</i>		
<i>County seat: Ellicott City</i>		
<i>Population 1940: 1,216</i>		
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
55.6	61.2	28.1

Geographic considerations

Howard County lies west and southwest of Baltimore, with a small segment of Baltimore County about four miles in width separating the County from the City. It is bounded by Baltimore County and Carroll County on the north, Frederick, Montgomery, and Prince George's counties on the west and south, and Anne Arundel and Baltimore counties on the east.

It is next to the smallest county in the State, having 251 square miles of area.

The surface is largely rolling in nature and lends itself to farming.

Population

The population of Howard County, as of 1943, was 18,481. With 73.6 persons per square mile, it ranks twelfth among the counties of the State.

The population growth experienced has been small, amounting to 16.8% within 23 years, whereas the overall increase for the Baltimore Base Area, including Howard County, was 40.5% for the same period.

The nonwhite population, as of 1945, was 3,012, or 16.3% of the total.

There are no incorporated municipalities in the County. The population distribution by election districts, as of 1940, was as follows:

District 1, Elkridge.....	3,229
District 2, Ellicott City.....	3,778
District 3, West Friendship.....	1,974
District 4, Lisbon.....	2,410
District 5, Clarksville.....	2,304
District 6, Guilford.....	3,480

For 1940, the residents of the County were classified as 61.3% rural nonfarm and 38.7% rural farm.

Transportation

Highways cross the County in all directions, with several leading into Baltimore City. The Baltimore

and Ohio Railroad has a line going into Ellicott City, the County Seat. Busses and trolleys furnish transportation between Ellicott City and Baltimore City.

Industry and commerce

There are no large industries in Howard County. Many residents travel to Baltimore City for employment.

The per capita income of this County was \$455.08 in 1940, making it the sixteenth county in the State in this respect. In 1945, with a per capita income of \$861.70, the County was thirteenth in the State.

Physicians

There are 12 physicians practicing in Howard County. Nine of these physicians have hospital affiliations. Their average age is 45 years, the youngest being 31 years of age and the oldest 70 years.

They are distributed throughout the County as follows:

Elkridge.....	2	Savage.....	1
Ellicott City.....	8	Clarksville.....	1

On the basis of the County's population in 1943, there was one physician for every 1,540 residents.

GENERAL HOSPITAL FACILITIES

There are no general hospitals in Howard County and no municipalities which might support one. The majority of the residents travel to Baltimore City for hospital service. Some residents use the institutions in Montgomery County.

Conclusions

No hospital is recommended for this County. Its population was taken into consideration in establishing the needed beds for Baltimore City. It was made, therefore, a part of the Baltimore Base Area.

CALVERT COUNTY

RURAL AREA NUMBER 2

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 10,549	65 increase	8.3% increase
1940: 10,484	956 increase	7.6% increase
1930: 9,528	216 decrease	2.2% decrease
1920: 9,744		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 4,916	46.6	1945: \$743.39
1940: 4,880	46.5	1940: \$367.61
Classification of residents, 1940		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
0.0%	34.2%	65.8%
<i>Land area: 219 square miles</i>		
<i>Population per square mile, 1943: 48.2</i>		
<i>County seat: Prince Frederick</i>		
<i>Population 1940: 200</i>		
Births in hospitals as per cent of total births, 1945		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
58.3	76.9	39.7
General hospital facilities		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Calvert County Hospital	Prince Frederick	26

Geographic considerations

Calvert County is a peninsula which extends south from its common boundary with Anne Arundel County. It has the Patuxent River for its western boundary and the Chesapeake Bay for its eastern boundary.

It is generally level and contains 219 square miles, being the smallest county in the State.

Population

The population of this County was 10,549 in 1943. During the 23-year period from 1920 to 1943, the increase amounted to 805 people, or 8.3%. Distribution of the County's population is fairly even. With a density of 48.2 persons per square mile in 1943, the County ranked seventeenth in this respect.

In 1940 the population distribution according to election districts, was as follows:

District 1, Solomons Island	3,513
District 2, Prince Frederick	3,092
District 3, Sunderland	3,879

For the same year the residents were classified as 34.2% rural nonfarm and 65.8% rural farm.

Nonwhite persons, numbering 4,916, made up 46.6% of the population in 1945.

Transportation

A highway extends the length of the County from north to south and has branches extending to numerous points on the eastern and western shores. Small ferries connect Calvert County with St. Mary's County in the extreme south and with Charles County at approximately the middle of Calvert County.

Prince Frederick, the County Seat, is the location of the Calvert County Hospital. It lies 35 miles south of Annapolis, 39 miles southeast of Washington, and 60 miles south of Baltimore. Highways connect these communities.

Industry and commerce

There are no large industries in this County. The only manufacturing plant listed by the Baltimore Association of Commerce is a shipbuilding firm at Solomons in the southern extremity of the County. Most residents are engaged in fishing and farming.

The per capita income for the County was \$367.61 in 1940, the County being nineteenth in the State in this respect. In 1945, with a per capita income of \$743.39, the County ranked twenty-first in the State.

Physicians

There are five physicians practicing in Calvert County. They are distributed as follows:

Prince Frederick	2	Huntington	1
Solomons	1	Owings	1

All of these men are general practitioners. Their average age is 47 years.

On the basis of the County's 1943 population, there was one physician to every 2,110 residents.

GENERAL HOSPITAL FACILITIES

CALVERT COUNTY HOSPITAL

The Calvert County Hospital, located in Prince Frederick, is owned by a nonprofit corporation. The Board of Directors, with a membership of 13, serves for three-year terms. The Board is self-perpetuating.

A Ladies' Auxiliary, with a membership of 35, furnishes linens and helps with other expenses of the hospital.

Area served: Of the patients treated, 91% are residents of Calvert County. A few residents of Anne Arundel, Charles, and Prince George's counties have been patients.

Building: The building is a frame structure. The interior and exterior construction is inflammable.

Bed capacity: The capacity is 26 beds, of which 11, or 42.3%, are reserved for nonwhite patients.

Utilization: The rate of occupancy of this hospital is 44.8% and the average length of stay per patient is 6.1 days. During the year for which the report was made, the patients fell into the following categories:

	Number of patients	Per cent
Medical	196	23.4
Surgical	177	25.6
Obstetric	188	27.2
Pediatric	126	18.2
Other	4	0.6
Totals	691	100.0

Medical staff: The Medical Staff is not organized. Privileges are granted by the Board of Directors to licensed physicians upon application. Four physicians make up the total staff. On occasions, physicians from Baltimore City are called in for surgery or consultation.

Personnel: The personnel consists of 12 full-time and two part-time employees, making a ratio of 0.5 employee per bed. Five of the employees are furnished living quarters within the hospital.

Educational program: There is no educational program in effect at this hospital.

Building plans: The Board of Directors recognizes the fact that this building is not suitable as a hospital and presents a hazard. The Board feels that it cannot raise sufficient funds to build a new hospital, but is making an effort to raise funds locally and to obtain an appropriation from the State to modernize the present building.

Conclusions

Calvert County, with a population of 10,549, qualifies as a rural area. On the basis of the standard for rural areas, this County is allotted 26 beds. On account of the hazard presented and the very unsatisfactory physical condition of the existing hospital, it was considered unacceptable, thus qualifying the area for the allocation of its full quota of 26 new beds.

While it is considered inefficient to construct hospitals with a capacity of less than 50 beds, in view of the low occupancy rate reported, there is no justification for the installation of more than 26 beds in this area.

Recommendations

It is recommended that this area be classified as a rural area.

It is further recommended that the present hospital be replaced with a new structure of the same bed capacity. In order to justify the expenditure of funds necessary for such program and in order to make as efficient use of the personnel as possible, it is further recommended that provision be made in this new structure for the housing of the County Health De-

partment. A cooperative arrangement should be set up for the use of the facilities and personnel by both the County Health Department and the hospital, similar to the arrangement which has been in force for some time at the Physicians Memorial Hospital in La Plata, Charles County.

Because of the hazard presented by the unsatisfactory structure in which the hospital is now housed, it is urged that this replacement be made as soon as possible.

CECIL COUNTY

INTERMEDIATE AREA NUMBER 5

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 32,055	5,648 increase	35.8% increase
1940: 26,407	580 increase	11.8% increase
1930: 25,827	2,215 increase	9.4% increase
1920: 23,612		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 2,885	9.0	1945: \$804.02
1940: 2,356	8.9	1940: \$479.38
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
13.3%	55.2%	31.5%
<i>Land area: 352 square miles</i>		
<i>Population per square mile, 1943: 91.1</i>		
<i>County seat: Elkton</i>	<i>Population</i>	
	1940: 3,518	
	1930: 3,331	
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
78.1	78.8	68.0
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Union Hospital	Elkton	72

Geographic considerations

Cecil County is located in the northeast corner of the State. It is bounded by Delaware on the east, Pennsylvania on the north, the Susquehanna River and Chesapeake Bay on the west, and Kent County on the south. On the opposite side of the Susquehanna River is Harford County.

It has 352 square miles of land area, making it the seventeenth county in the State in size.

The Elk River, which appears as an extension of the Chesapeake Bay, almost divides Cecil County into two parts. The area between the Elk River and the Maryland-Delaware state line is typical of the Eastern Shore, being rather level. The remainder of the County north and west of Elkton is hilly.

Population

The population of the County increased at a moderate rate until 1940. Between 1940 and 1943, the in-

crease exceeded that of the previous 20 years, due largely to war industries located at Elkton. The density was 91.1 persons per square mile in 1943, making it the eighth county in the State in this respect.

The largest community is Elkton, which had a population of 3,518 in 1940.

There is a population concentration in the extreme west-central area on the opposite side of the Susquehanna River from Havre de Grace. The area south of Elkton and east of the Elk River is sparsely populated.

Nonwhite persons, numbering 2,885, made up 9% of the population of the County in 1945.

With the exception of a few residents in the southern extremity of the County, all residents live within a radius of 12½ miles of a hospital. The residents of the western portion are within the service area of the hospital at Havre de Grace.

The population distribution in 1940, according to election districts was as follows:

District 1, Cecilton	2,182
District 2, Chesapeake City	2,301
District 3, Elkton	5,890
District 4, Fair Hill	1,759
District 5, Northeast	3,693
District 6, Rising Sun	2,562
District 7, Port Deposit	6,058
District 8, Oakwood (Mount Pleasant)	889
District 9, Calvert (Brick Meeting House)	1,073

In the same year the residents of Cecil County were classified as 13.3% urban, 55.2% rural nonfarm, and 31.5% rural farm.

Transportation

The main lines of the Baltimore and Ohio Railroad and the Pennsylvania Railroad between Baltimore and Philadelphia cross Cecil County. Main highways between these cities also cross the County.

Several highways intersect at Elkton, making it readily accessible from all parts of the County by bus or rail transportation or other conveyances.

Industry and commerce

Elkton is the trading center for the central and southern portions of the County. The residents of the western portion use Havre de Grace as their trading center. Highway and rail transportation make Newark and Wilmington, Delaware, convenient of access, with the result that some Cecil County residents travel to these communities to shop.

The per capita income for the residents in 1940 was \$479.38, making it the thirteenth county in this respect. In 1945, with a per capita income of \$804.02, the County dropped to eighteenth place in the State.

During the war, a large industry for the production of explosives was located at Elkton. This establishment has since been closed.

There are two paper manufacturing plants, an iron works company, and a fabricated steel plant located in the County.

Physicians

Eighteen physicians practice in the area. This establishes a ratio of one physician to every 1,781 persons. They are distributed as follows:

Elkton	8	Perryville	2
Chesapeake City	2	Port Deposit	2
North East	3	Rising Sun	1

These physicians practice in the following fields:

Medicine	11	Obstetrics	2
Surgery	4	X-ray	1

GENERAL HOSPITAL FACILITIES

UNION HOSPITAL

The Union Hospital, located in Elkton, was established in 1921. It is owned by the community and is under the direction of a Board of Directors. The Board consists of 11 members, who elect new members to fill vacancies as they occur. This hospital holds provisional approval by the American College of Surgeons.

A Ladies' Auxiliary, with a membership of 1,004, supplies linens and purchases equipment.

Area served: Ninety-five per cent of the patients treated are residents of Elkton and the immediately surrounding area.

Buildings: In 1944 the hospital vacated its old location in a frame structure and was established in a new modern building. At the time of this change, the first floor of the old building was turned over to the community for the use of the State health clinics. The remainder of the old hospital is used as a nurses' residence.

Bed capacity: The capacity is 72 beds and 25 bassinets. Ten beds and nine bassinets are reserved for nonwhite patients.

Utilization: The rate of occupancy for the year was 62.8%. The average length of stay per patient was 11.3 days. During the year for which the report was made, the patients fell into the following categories according to diagnosis:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	292	20.2
Surgical	623	42.9
Obstetric	368	25.4
Pediatric	166	11.5
Totals	1,449	100.0

Medical staff: The Medical Staff is organized, having elected officers. The Executive Committee of the Staff functions as liaison between the Administration and the Staff. Appointment to membership is made by the Board upon recommendation of the Medical Staff. Privilege to do major surgery or work in the specialties is granted on the basis of recognized ability and certification by the Specialty Board or Fellowship in the American College of Surgeons.

Personnel: The personnel of the hospital consists of 41 full-time employees and five part-time employees, which establishes a ratio of 0.6 employee per bed.

Educational activities: There is no educational program in operation at this hospital.

Conclusions

Cecil County, with a population in excess of 25,000, qualifies as an intermediate area. At the rate of 4.0 beds per 1,000 population, the County should have 128 beds. The present rate of occupancy of 62.4% at the Union Hospital, which is centrally located, is as high as can reasonably be expected in a hospital of 72 beds.

The hospital at Havre de Grace reported having had residents of Cecil County as patients equivalent to 31.9% of the total number of patients treated in the Elkton Hospital.

Recommendations

It is recommended that Cecil County be classified as an intermediate area.

To bring the normal bed capacity of Cecil County up to area standards, it is recommended that 56 beds be added to the Union Hospital at such time as the utilization indicates the need and funds are available.

CHARLES COUNTY

RURAL AREA NUMBER 3

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 19,784	2,172 increase	11.7% increase
1940: 17,612	1,446 increase	0.5% decrease
1930: 16,166	1,539 decrease	8.7% decrease
1920: 17,705		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 8,111	1945: 41.0	1945: \$579.36
1940: 7,228	1940: 41.0	1940: \$319.90
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
0.0%	45.0%	55.0%
<i>Land area: 458 square miles</i>		
<i>Population per square mile, 1943: 43.2</i>		
<i>County seat: La Plata</i>	<i>Population</i>	1940: 488
		1930: 332
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
52.1	86.2	17.6
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Physicians Memorial Hospital	La Plata	33

Geographic considerations

Charles County is bounded on the west and south by the Potomac River, across which lies Virginia. Its eastern boundary is made up of the Wicomico River and by a line which is the common boundary with St. Mary's County. A small area extends to the Patuxent River on the east. It has a common boundary with Prince George's County on the north. With a land area of 458 square miles, Charles County was ninth among the counties of the State.

Population

The population of Charles County, as of 1943, was 19,784. La Plata, the County Seat, was credited with having a population of 488 in 1940. Indian Head to the west had a population of 1,104 in the same year. The balance of the population is evenly distributed across the County. On the basis of the County's population in 1943, there were 43.2 persons per square mile. In this respect Charles County ranked nineteenth in the State.

In 1945, the nonwhite population, numbering 8,111, comprised 41.0% of the County's total.

The population of Charles County according to election districts, as of 1940, was as follows:

District 1, La Plata.....	1,957
District 2, Hill Top.....	800
District 3, Cross Roads.....	1,251
District 4, Allens Fresh.....	1,708
District 5, Harris Lot.....	1,897
District 6, White Plains.....	2,215
District 7, Pomonkey.....	3,142
District 8, Bryantown.....	1,948
District 9, Patuxent.....	1,142
District 10, Marbury.....	1,552

In the same year the residents were classified as 45.0% rural nonfarm and 55.0% rural farm.

The population decreased between 1920 and 1930. From 1930 to 1940, however, the population increased, and an even greater increase occurred between 1940 and 1943. The total population increase from 1920 to 1943 was 2,079, or 11.2% over the 1920 level.

Transportation

All parts of the County are served by a network of secondary roads which join the primary highways, Routes 301 and 5, which cross the County from north to south. Access to La Plata, where Physicians Memorial Hospital is located, is convenient from all parts of the County.

A branch of the Pennsylvania Railroad crosses the County from south to north and continues into Baltimore.

Industry and commerce

No manufacturers are listed in Charles County by the Baltimore Association of Commerce. The majority of the residents are engaged in agricultural pursuits.

The per capita income in 1940 was \$319.90, making Charles County the twentieth county in the State in this respect. In 1945, it was \$579.36, dropping the County to twenty-second place in the State.

Physicians

Eleven physicians are residing and practicing in Charles County. Three other physicians from sur-

rounding areas have patients in the County. They are distributed as follows:

La Plata	3	Indian Head.....	1
Hughesville	3	Waldorf	1
Marbury.....	1	Bel Alton.....	1
Wayside.....	1		

Four of these physicians are surgeons and ten are general practitioners.

On the basis of its 1943 population, Charles County had a ratio of one resident physician to every 1,413 persons.

GENERAL HOSPITAL FACILITIES

PHYSICIANS MEMORIAL HOSPITAL

The Physicians Memorial Hospital, located in La Plata, was opened in 1938. It is owned by a nonprofit association. Its Board of Directors consists of 12 members who serve for terms of one year. Vacancies are filled by election by the Board, except in the case of one member who is appointed by the County Commissioners.

A Ladies' Auxiliary engages in fund-raising efforts to purchase equipment for the hospital.

Area served: Residents of Charles County make up 91% of the patients treated at this hospital. Some patients are admitted from St. Mary's and Prince George's counties.

Buildings: The buildings are brick structures, but the interior is constructed of inflammable materials.

Bed capacity: The normal capacity is 33 beds, two of which are temporarily out of service to make room for a business office. Eight of these beds are reserved for nonwhite patients.

Utilization: The rate of occupancy is 39.0% based on the number of beds in use, but 36.7% based on the normal capacity. The average length of stay per patient is 5.3 days.

During the year for which the report was made, the patients fell into the following categories:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	470	56.9
Surgical	95	11.5
Obstetric	216	26.2
Pediatric	26	3.1
Other	19	2.3
Totals	826	100.0

Medical staff: The Medical Staff is not organized. All members of the Charles County Medical Society are privileged to treat patients in the hospital. In addition, four physicians from the District of Columbia treat patients in this hospital.

Privilege to do major surgery is granted to applicants who have had one year of approved residency in surgery and who have performed under supervision or assisted with one hundred major operations during the previous two years.

Personnel: The personnel of this hospital is made up of ten full-time and five part-time employees. Considering the part-time employees as being on a one-half-time basis, this establishes a ratio of 0.4 employee per bed. Five employees are given quarters at the hospital.

Educational activities: There is no educational program in effect.

Building plans: No building plans are under consideration at present.

Conclusions

Charles County, with a population of less than 25,000, qualifies as a rural area. The population is practically constant. On the basis of the standard for rural areas, this area would be entitled to 49 beds. The normal capacity at the Physicians Memorial Hospital at present is 33 beds, indicating an unmet need of 16 beds.

Since the present occupancy rate is only 39.0% and the average length of stay per patient is 5.3 days, the present existing beds are not being overtaxed.

Recommendations

It is recommended that Charles County be classified as a rural area and that 16 additional beds be allocated to this area to bring it up to the standard for rural areas.

On account of the low utilization being made of the existing facilities, this allotment is not considered urgent.

DORCHESTER COUNTY

INTERMEDIATE AREA NUMBER 7

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 24,264	3,742 decrease	13.0% decrease
1940: 28,006	1,193 increase	0.4% increase
1930: 26,813	1,082 decrease	3.9% decrease
1920: 27,895		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 7,012	28.9	1945: \$1,063.84
1940: 8,089	28.9	1940: \$ 452.83
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
36.1 %	34.1%	29.9%
<i>Land area: 580 square miles</i>		
<i>Population per square mile, 1943: 41.8</i>		
<i>County seat: Cambridge</i>	<i>Population</i>	<i>1940: 10,102</i>
		<i>1930: 8,544</i>
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
66.7	83.9	35.4
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Cambridge-Maryland Hospital	Cambridge	65

Geographic considerations

Dorchester County is the largest of the nine counties making up the Eastern Shore. It lies south of Talbot and Caroline counties. It is separated from Talbot County by the Choptank River. It lies northwest of Somerset County and Wicomico County and is separated from them by the Nanticoke River. It is bounded by the Chesapeake Bay on the west and southwest. The eastern boundary is common with the State of Delaware.

The 580 square miles of surface is generally flat and is cut by many rivers which empty into the Chesapeake Bay.

Population

The population of this County is concentrated in the northern third of the area with 36.1% of the entire County population being residents of Cambridge, the shopping center and County Seat. The southern portion of the County is very thinly populated, with large areas having no residents.

The population was almost constant during the two decades between 1920 and 1940. The decrease in population between 1940 and 1943 is attributable to the fact that no war industries were located in the area. It is assumed that this loss is only transitory.

During the period 1930-1940 the population of Cambridge increased from 8,544 to 10,102.

The population density, as of 1943, was 41.8 persons per square mile, making it the twentieth county in the State in this respect.

Nonwhite persons, numbering 7,012, made up 28.9% of the population in 1945.

The population is concentrated largely within a radius of 12½ miles of Cambridge, there being only 5,550 residents living outside such radius. Most of these are in the eastern section of the County. The largest incorporated community in the County outside of Cambridge is Hurlock, which had a population of 800 in 1940.

The election districts of Dorchester County, as of 1940, had the following populations:

District 1, Fork	1,565
District 2, East New Market	1,891
District 3, Vienna	1,231
District 4, Taylors Island	590
District 5, Lakes	975
District 6, Hooper Island	1,033
District 7, Cambridge	11,945
District 8, Neck	881
District 9, Church Creek	988
District 10, Straits	1,080
District 11, Drawbridge	294
District 12, Williamsburg	646
District 13, Bucktown	721
District 14, Linkwood	880
District 15, Hurlock	2,091
District 16, Madison	408
District 17, Salem	507
District 18, Elliott	230

In the same year the population was classified as 36.1% urban, 34.1% rural nonfarm, and 29.9% rural farm.

Transportation

Highways extend from Cambridge to the populated areas of the County. A principal highway between the Chesapeake ferries, Easton, Salisbury, and the south passes through Cambridge. The bridge across the Choptank River at Cambridge brought Cambridge within fifteen miles of Easton; whereas, formerly, it was necessary to travel a circuitous route in order to go from one of these communities to the other.

The Pennsylvania Railroad maintains service into Cambridge and through the eastern part of the County to Salisbury in the south.

Industry and commerce

The principal employers in the County are the canning factories at Cambridge and Hurlock. Several manufacturers of men's shirts are located in Cambridge. The remainder of the population are engaged in retail trade and service industries, including employment in the County offices. The residents of the County outside of Cambridge are principally engaged in farming and fishing.

The per capita income in 1940 was \$452.93, placing Dorchester County seventeenth in the State in this respect. In 1945, it rose to ninth place in the State, with a per capita income of \$1,063.84.

Physicians

There are 21 physicians practicing in the area. They are distributed as follows:

Cambridge.....	16
East New Market	1
Hurlock.....	2
Vienna.....	1
Fishing Creek.....	1

Their average age is 50 years. According to the County's 1943 population, there was one physician to every 1,155 residents.

GENERAL HOSPITAL FACILITIES

CAMBRIDGE-MARYLAND HOSPITAL

The Cambridge-Maryland Hospital, located in Cambridge, was founded in 1899 by a nonprofit association. It is controlled by a Board of Directors with a membership of 12, with an indeterminate term of office.

A Women's Auxiliary, with a membership of 50, engages in activities for the support of the hospital.

This hospital has full approval of the American College of Surgeons. Its nursing school is State-approved.

Area served: A rough estimate of the place of residence of patients served showed 96.4% as residents of Dorchester County.

Bed capacity: The normal capacity of this hospital is 65 beds. However, 75 beds were in use at the time of the survey. Eleven bassinets are the normal capacity; however, 15 were in use at the time of the survey. Of these

facilities, 18 beds and four bassinets are reserved for nonwhite patients.

Utilization: An analysis of patients by diagnosis showed the following classifications:

	Number of patients	Per cent
Medical	551	34.1
Surgical	517	31.9
Obstetric	283	17.5
Other	267	16.5
Totals	1,618	100.0

The rate of occupancy, based on the bed complement, was 51.5%. Based on the normal bed capacity, it was 59.5%. The average length of stay per patient was 8.6 days.

In 1945, 66.7% of all births in the County occurred in hospitals. Of these, 83.9% of the births to white mothers occurred in hospitals and 35.4% of births to nonwhite mothers occurred in hospitals.

Medical staff: The Medical Staff is organized, having elected officers. Staff committees function under the titles of Credentials Committee, Medical Records Committee, and Membership Committee. Membership is granted by the Board of Directors on recommendation of the Staff, following approval of the Credentials Committee.

The Active Staff is comprised of 28 members. The Consulting Staff has nine members, and the Visiting Staff two members.

Privilege to do major surgery is granted on the basis of resident training and demonstrated ability, or Fellowship in the American College of Surgeons, or certification by a Specialty Board. In the specialties, privilege to do major work is granted on the basis of special training and demonstrated ability.

Personnel: The personnel consists of 46 full-time and five part-time employees. This establishes a ratio of 0.8 employee per bed, based on normal bed capacity. There are also six volunteer workers.

Educational activities: A nursing school is conducted. At the time of the survey, there were 14 students in training. Affiliations are maintained for training in pediatrics at the Children's Hospital in Washington, D. C., and for medicine and dietetics in the Baltimore City Hospitals.

Building plans: This hospital has under consideration plans for an addition which will include in the neighborhood of 30 new beds, along with a boiler house, elevator, and new dietary department.

Conclusions

Cambridge, being the political, commercial, and industrial center of the County, is the logical point at which to have the medical center for the area.

The Cambridge-Maryland Hospital, located in Cambridge, and operating at an occupancy rate of 51.5%, ordinarily would not be considered overtaxed. This hospital is not in urgent need of additional beds. However, the planned elevator and dietary department renovation and equipment are considered necessary.

This hospital recently has gone through a reorganization which, it is expected, will create a greater community interest in the hospital and result in greater utilization. Under a long-range program, this community will have need for 112 beds. This conclusion is based on the increase of population expected to result from postwar adjustment¹ and increased utilization of

¹As of July 1, 1946, the estimated population of Dorchester County was 28,791, according to the Maryland State Department of Health, Bureau of Vital Statistics.

the hospital under its new administration.

Recommendations

Because its population for the period 1920-1940 exceeded 25,000 people, and as of 1943 was only slightly under 25,000, it is recommended that Dorchester County be classified as an intermediate area. It is recommended that 47 additional beds be allocated to this area: that is, 32 to bring the area up to its standard of 97 beds, plus 15 from pool beds.

FREDERICK COUNTY

INTERMEDIATE AREA NUMBER 3

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 51,774	5,538 decrease	1.5% decrease
1940: 57,312	2,872 increase	9.1% increase
1930: 54,440	1,899 increase	3.6% increase
1920: 52,541		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 4,245	8.2	1945: \$1,177.27
1940: 4,705	8.2	1940: \$ 582.62
Classification of residents, 1940		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
34.3%	32.2%	33.5%
<i>Land area: 664 square miles</i>		
<i>Population per square mile, 1943: 78.0</i>		
<i>County seat: Frederick</i>	<i>Population 1940: 15,802</i>	<i>1930: 14,434</i>
Births in hospitals as per cent of total births, 1945		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
69.9	68.8	80.4
General hospital facilities		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Frederick City Hospital	Frederick	111
Frederick County Emergency Hospital	Frederick	55

Geographic considerations

Frederick County is bounded on the north by Pennsylvania, on the west by Washington County, on the south by the Potomac River which separates it from the State of Virginia and Montgomery County, and on the east by Howard and Carroll counties. The western boundary, common to Frederick and Washington counties, is located on the ridge of a mountain. The line between Carroll and Frederick counties is a surveyed line in hilly country. The boundary between Carroll and Frederick counties runs along the Monocacy River.

The area of the County is 664 square miles, making it the second county in the State in size. Mountains run north and south covering most of the western third of the County. A rolling terrain characterizes the eastern third.

Population

The population of the County, as of 1943, was 51,774.

This is 5,538 less than was reported in 1940 and 767 less than reported in 1920. The population density in 1943 was 78.0 persons per square mile, making Frederick County the eleventh in the State in this respect.

The mountainous area in the northwest corner of the County is not populated, but otherwise the County is developed for residences and farming.

Frederick City is the principal community of the County. It had a population of 15,802 in 1940. It is the County Seat and is located to the south of the center. Brunswick, the second largest community of the County, is located in the southwest corner. Its population in 1940 was 3,856.

The nonwhite population, numbering 4,245 in 1945, constituted 8.2% of the County's residents.

The population of Frederick County according to election districts, as of 1940, was as follows:

District 1, Buckeystown	2,439
District 2, Frederick	17,637
District 3, Middletown	2,051
District 4, Creagerstown	909
District 5, Emmitsburg	3,343
District 6, Catoctin	1,054
District 7, Urbana	1,879
District 8, Liberty	1,211
District 9, New Market	2,653
District 10, Hauvers	1,491
District 11, Woodsboro	1,862
District 12, Petersville	1,375
District 13, Mount Pleasant	884
District 14, Jefferson	1,266
District 15, Thurmont	2,944
District 16, Jackson	1,242
District 17, Johnsville	1,185
District 18, Woodville	1,055
District 19, Linganore	822
District 20, Lewistown	1,265
District 21, Tuscarora	1,026
District 22, Burkittsville	996
District 23, Ballenger	636
District 24, Braddock	863
District 25, Brunswick	3,856
District 26, Walkersville	1,368

In 1940, the population was classified as 34.3% urban, 32.2% rural nonfarm, and 33.5% rural farm.

Transportation

Frederick has railroad service by the Baltimore and Ohio Railroad, Pennsylvania Railroad, and Western Maryland Railroad.

Local and long-distance bus service runs through Frederick City and to most parts of the County. Highways radiate from Frederick City to all parts of the County, the City being readily accessible to all residents of the County.

Industry and commerce

A large per cent of the residents of the County are engaged in farming. Other residents are employed at the canneries, manufacturing plants, and clothing factories.

The per capita income for Frederick County in 1940 was \$582.62, making it the sixth county in the State in this respect. In 1945, with a per capita income of \$1,177.27, it ranked seventh in the State.

Physicians

Forty-nine physicians have their homes in Frederick County and practice there. Five other physicians from surrounding areas have patients in the County.

The distribution of physicians by residence is as follows:

Frederick City	29	Middletown	1
Thurmont	3	Brunswick	4
Jefferson	1	Johnsville	1
Emmitsburg	2	New Market	2
Walkersville	2	Ijamsville	1
Libertytown	3		

Forty-one physicians have affiliations with the Frederick City Hospital.

Thirty-eight physicians are general practitioners. Eleven others limit their practice to the specialties as follows:

Public health	1	X-ray	1
Pediatrics	1	Internal medicine	1
Eye, ear, nose, and throat	3	Surgery	3
		Psychiatry	1

The average age of the physicians based on the forty-seven ages reported was 57 years. Forty-seven per cent were 60 years of age or over. Thirty-eight per cent were between the ages of 40 and 61 years. Fifteen per cent were 40 years of age or under.

On the basis of 1943 population there was one resident physician for every 1,057 residents.

GENERAL HOSPITAL FACILITIES

FREDERICK CITY HOSPITAL

The Frederick City Hospital, located in Frederick, is owned and operated by a nonprofit association known as the Frederick City Hospital Association. It was opened in 1902. It is a general hospital and maintains separate departments for pediatrics and obstetrics.

It has full approval by the American College of Surgeons. Its nursing school has State-approval.

A Board of Managers with a membership of 30 is responsible for the hospital. Members are elected for life. Vacancies are filled by election by the Board.

Area served: An analysis of patients by residence, based on a study of four months' experience, shows the following:

Frederick City	44.2%
Frederick County (outside of Frederick City)	29.8
Carroll County	13.5
Montgomery County	7.8
Others	4.7
	100.0%

Buildings: The original buildings have had additions built from time to time. Interior construction of the older buildings is not fire-resistant.

Bed capacity: The normal bed capacity of this hospital is 111, but because of the excessive demand for service additional beds have been put into use. At the date of the survey, 125 beds were in service. Twenty-four bassinets are in use. Eleven beds are reserved for non-white patients.

Utilization: The rate of occupancy based on the normal bed capacity was 74.5%. The average length of stay per patient was 9.6 days.

An analysis of patients by diagnosis showed the following:

	Number of patients	Per cent
Medical	825	21.9
Surgical	1,738	46.2
Obstetric	855	22.7
Pediatric	90	2.3
Orthopedic	222	5.9
Other	30	1.0
Totals	3,760	100.0

Medical staff: The Medical Staff is organized and has elected officers. Privileges to do surgery and work in specialized fields are granted on the basis of recommendation by the Staff.

Personnel: Ninety-one full-time employees and 18 part-time employees make up the personnel. This

establishes a ratio of 0.9 employee per bed, based on normal bed capacity.

There are also 22 volunteer workers.

Educational activities: A nursing school is conducted. Forty-seven students were in training, as of the date of the survey.

Building plans: The Frederick City Hospital has some funds accumulated for building purposes. A campaign is planned to raise additional funds for adding a wing, which will include a delivery room, nursery, and service room, and increase the capacity by 25 beds.

FREDERICK COUNTY EMERGENCY HOSPITAL

The Frederick County Emergency Hospital at Frederick is operated by the County Commissioners. It was built in 1934 and is located on the grounds of the County Home.

Area served: As a County-owned institution, admissions are limited to residents of the County.

Buildings: The exterior walls are of brick construction, but the interior is constructed of inflammable materials.

Bed capacity: The normal capacity is 55 beds, of which 22 are reserved for nonwhite patients. Ten bassinets are in use.

Utilization: The rate of occupancy is 65.5%. The average length of stay per patient is 23.9 days. It is understood that the patients are largely indigent. The length of stay is unusually long due to the fact that this is used as the infirmary for the County Home and most of the patients from this source are aged. During the year for which the report was made there were 550 patients discharged. No records are available as to the types of service rendered.

Medical staff: There is no organized Medical Staff. A physician appointed by the County Commissioners functions as Medical Director.

Personnel: Fourteen employees make up the personnel, representing a ratio of 0.3 employee per bed. This ratio is low because maintenance, heat, and food service are supplied by the County Home.

Educational activities: No educational program is in operation.

Building plans: No building program is under consideration at the present time.

SCHNAUFFER HOSPITAL

The Schnauffer Hospital, located at Brunswick, in the southwestern corner of the County, was serving the local community and the surrounding area at the time of the survey. Residents of Virginia patronized this hospital.

It is owned by Doctor Schnauffer, who has since closed it. The owner stated the reason for closing the hospital was ill health.

The building is in the process of being remodeled for use as an apartment building.

Conclusions

Frederick City, located near the center of the area and accessible to all parts of the County, is the trading and medical center. That it is the medical center is established by the existence of two general hospitals and 29 resident physicians there.

Eighty-seven and eight-tenths per cent of the population of the County live within 12½ miles of Frederick. Approximately 3,800 residents of the southern extremity and 3,200 residents of the northeastern corner of the County live outside the 12½-mile radius.

There is an apparent need for additional hospital beds in the area. These beds should be installed as an addition to the Frederick City Hospital.

On the basis of population and existing facilities, Frederick County qualifies as an intermediate area. A ratio of 4.0 beds per 1,000 population, the standard for intermediate areas, entitles this area to 207 beds, based on the County's population in 1943. Since there are already 166 beds in service, 41 beds are needed to bring the existing beds to the standard for the area.

Recommendations

It is recommended that Frederick County be classified as an intermediate area.

It is further recommended that an addition of 41 beds be programmed for the Frederick City Hospital.

GARRETT COUNTY

RURAL AREA NUMBER 1

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 18,534	3,447 decrease	5.8% decrease
1940: 21,981	2,073 increase	11.7% increase
1930: 19,908	230 increase	1.2% increase
1920: 19,678		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 0	0.0	1945: \$752.62
1940: 5	0.0	1940: \$311.72
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
0.0%	49.9%	50.1%
<i>Land area: 668 square miles</i>		
<i>Population per square mile, 1943: 27.7</i>		
<i>County seat: Oakland</i>	<i>Population</i>	1940: 1,587
		1930: 1,583
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
38.9	38.9	0.0

Geographic considerations

Garrett County is the westernmost county of Maryland. It is bounded by Pennsylvania on the north, by West Virginia on the west and south, and by Allegany County on the east.

It is the first county of the State in area, having 668 square miles. Most of the surface is mountainous; however, numerous farms have been developed where the land is flat or rolling.

Population

In 1943 the population of Garrett County was 18,534. From 1940 to 1943, there was a loss in population amounting to 3,447 people, or 15.7%. This can be attributed to the fact that there were no war industries in the County. During the previous decade, 1930 to 1940, an increase of 10.4% was recorded. From 1920 to 1930, the change amounted to 1.2%. The net change for the 23-year period was a decrease of 5.8%, or a loss of 1,144 people.

As of 1945, no nonwhite persons were residing in the County.

With its large area and sparse population, Garrett County ranks lowest in the State in population density, with 27.7 persons per square mile. As of 1940, the residents were classified as 49.9% rural nonfarm and 50.1% rural farm.

The population according to election districts was as follows:

District 1, Swanton.....	1,233
District 2, Friendsville and Selbysport.....	1,954
District 3, Grantsville.....	2,407

District 4, Bloomington.....	817
District 5, Accident.....	1,219
District 6, Sang Run.....	923
District 7, East Oakland.....	1,187
District 8, Ryans Glade.....	2,343
District 9, Johnsons.....	861
District 10, Deer Park.....	950
District 11, The Elbow.....	292
District 12, Bittinger.....	674
District 13, Kitzmillersville.....	2,028
District 14, West Oakland.....	3,125
District 15, Avilton.....	471
District 16, Mountain Lake Park.....	1,497

Transportation

Access to the County is possible by two highways: one running from Frostburg to Westernport in Allegany County and into Oakland; and the other running directly west from Frostburg to Keyser Ridge, from which point Route 219 furnishes access to the area between Keyser Ridge and Oakland. Other highways lead to Oakland from West Virginia on the south and west.

It was reported that severe winters are experienced frequently, making highway travel difficult at that time of the year.

The Baltimore and Ohio Railroad has several trains stopping at Oakland daily. Three of these trains pass through Cumberland. A Western Maryland Railroad line runs through daily with four passenger trains to Cumberland and Elkins, West Virginia. Blue Ridge busses go into Oakland from Keyser Ridge, and from Red House on Route 50. Local busses furnish transportation from the near-by communities to Oakland.

Industry and commerce

The County is divided into two districts, the northern

district which lies along Route 40, and the southern district which centers around Oakland. Both districts look largely to Cumberland for supplying needs which cannot be procured locally.

Recently publicity has been given to a projected plan for the establishment of a \$10,000,000 recreation center near Oakland.

Oakland is reported to be the only shopping center in the entire County. One bank in Oakland reported having accounts from every part of the County.

There are several large mines in the area which, along with the railroads, provide employment. Several paper mills at Luke, in Allegany County, give some employment to residents. Some residents commute to Frostburg and Cumberland to work. Others work on farms.

In 1940 the income per capita was \$311.72, making it the twenty-first county in the State in this respect. For 1945 the per capita income in Garrett County rose to \$752.62, placing it twentieth in the State in this respect. For the same year, the per capita income for the State was estimated at \$1,291.61.

Physicians

Seven physicians practice in Garrett County as follows:

Oakland.....4	Grantsville.....1
Friendsville.....1	Kitzmillersville1

Only one of these physicians is affiliated with the Memorial Hospital in Cumberland. The youngest is 32 and the oldest is 66, their average age being 45.

On the basis of the County's 1943 population, this establishes a ratio of one physician to every 2,648 residents.

GENERAL HOSPITAL FACILITIES

In Garrett County three nursing homes were listed, but only one was in operation at the time of the survey. There are no general hospitals.

PROPOSED HOSPITAL CONSTRUCTION

Funds available: Mr. George W. Loar of Oakland, in his will, bequeathed \$170,000 for the construction of a memorial hospital in Oakland. Under the terms of the will, the County Commissioners may accept these funds and proceed with the erection of a hospital with the understanding that the direct management of the hospital will be turned over to a Board, consisting of the County Commissioners and five other persons designated under the will. Because of the limited time allowed for the acceptance of this gift, the Commissioners took formal action accepting the gift and have committed the County to the erection of a hospital.

Site: A site has been made available for the hospital. It lies above the level of the center of town but is easy of access, having a highway running along one side. The land is comprised of about 15 acres. Public service facilities are available to the site. The proposed hospital appears to be entirely satisfactory from the standpoint of facilities and access, and quite adequate in size.

Considerations: While a hospital is a very desirable facility in a community, it must be recognized that the

annual cost of maintenance and operation is quite high, averaging in the neighborhood of one third to one half of the equivalent of the capital invested. The annual operating cost of a \$500,000 hospital would be in the neighborhood of \$166,000.

Recognition should be taken of the fact that, if the community commits itself to the construction of a hospital, the income of the persons who will use the hospital must be adequate to support it or the County must stand ready to subsidize the free patients. The State has in operation its hospital care program, but under the present limitations, it does not cover the full cost, leaving part to be covered with local funds.

It is accepted generally that hospitals having less than 50 beds cannot be operated efficiently. Nevertheless, many hospitals of less than 50 beds are being operated. This factor should be weighed against the cost of maintaining empty beds and the inconvenience of travel to hospital facilities if the hospital community is not large enough to support a 50-bed hospital.

Public Law 725 (Appendix A) states in part that the maximum ratio between general hospital beds and population is 4.5 per 1,000 persons. This would vary upward in communities where there are outstanding physicians and facilities and downward where there is a lack of physicians and facilities, especially in areas located in close proximity to well-supplied centers. According to the standards set forth, Garrett County would rate as a rural area.

With Garrett County and Oakland situated as they are with relation to Cumberland, Baltimore, and Washington, consideration should be given this fact in determining the hospital beds required. On the basis of 2.5 general hospital beds per 1,000 population, a 46-bed hospital will supply the needs of Garrett County. The residents of the northern district along Route 40 will continue to travel to the existing hospitals in Frostburg and Cumberland. This will be offset by residents of West Virginia who will come into Oakland for hospitalization.

The establishment of a hospital in the area should attract doctors and nurses and will give to those practitioners already in the area the opportunity to practice medicine more nearly to the extent of their ability and knowledge.

The basic services which will be maintained in an area such as Oakland are general medicine, uncomplicated surgery, and uncomplicated obstetrics. It is not expected that there will be a need for enough of the other types of service to support highly skilled specialists. Patients needing such services will be referred to other areas where the need is great enough to attract specialists.

A relationship must be established and maintained between the local hospital staff and the medical groups in Cumberland and Baltimore, so that specialists will be on call for special occasions. These consultants should from time to time visit the area and conduct clinics for educational purposes.

Some thought must be given to making an arrangement with other small hospitals of comparable status

in the area for the sharing of the services of a roentgenologist and pathologist.

Conclusions

Oakland, now without any medical facilities, should have a hospital and medical center. The center should include facilities for the public health clinics and the County Health Department in addition to hospital beds and ancillary departments. By a cooperative arrangement with the State Health Department, X-ray and laboratory equipment and personnel can be made available to the County.

Three new physicians have located in the area, replacing older men who died or moved away, bringing the total to seven. The influx of young physicians gives some assurance that a medical staff can be organized.

Even though a hospital or health center is established at Oakland, some people in the northern part of the County would continue to travel to Frostburg and Cumberland for hospitalization. This factor will be offset by requests for care of cases now taken care of in homes; applications for service on elective surgery which, due to lack of facilities, is not done at the present time; and patients coming in from near-by towns in West Virginia.

If less than 50 beds are provided in the original structure, it should be so planned that a later addition can be made conveniently to bring the capacity up to 50 beds.

The County must be ready to underwrite deficits which may be large at first but should become smaller as the utilization of the hospital increases.

With a total absence of hospital facilities in this County and with approximately 18,000 of its 21,000 population in 1940 living more than 12½ miles from a general hospital, this hospital project should be given a high priority.

There is an immediate need for better quarters for the clinics being conducted by the County Health Department. Therefore, public health facilities definitely should be included in the proposed hospital.

Recommendations

It is recommended that Garrett County be classified as a rural area, and that a hospital with a capacity of 46 beds be constructed at Oakland. It is further recommended that quarters for the County Health Department be included in this hospital, and that this project be given a high priority.

KENT AND QUEEN ANNE'S COUNTIES

RURAL AREA NUMBER 5

<i>Population</i>	<i>Change from previous period</i>		<i>Change over 1920</i>	
1943: 25,265	2,676	decrease	18.6%	decrease
1940: 27,941	872	decrease	9.9%	decrease
1930: 28,813	2,214	decrease	7.1%	decrease
1920: 31,027				
	<i>Nonwhite population</i>		<i>Per cent nonwhite</i>	
	1945	1940	1945	1940
Kent County	3,947	4,061	30.2	30.2
Queen Anne's County	3,670	4,347	30.1	30.0
Combined	7,617	8,408	30.1	30.1
	<i>Per capita income</i>			
	1945		1940	
Kent County	\$1,209.85		\$577.27	
Queen Anne's County	\$ 901.34		\$372.82	
	<i>Classification of residents, 1940</i>			
	<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>	
Kent County	20.5%	48.3%	31.2%	
Queen Anne's County	0.0%	50.8%	49.2%	
Combined	9.9%	49.6%	40.6%	
	<i>Land area</i>	<i>Population per square mile, 1943</i>		
Kent County	284 square miles	46.0		
Queen Anne's County	373 square miles	32.7		
Combined	657 square miles	38.5		
	<i>Population</i>			
	<i>County seat</i>		1940	1930
Kent County: Chestertown			2,760	2,809
Queen Anne's County: Centreville			1,141	1,291
	<i>Births in hospitals as per cent of total births, 1945</i>			
	<i>Total</i>	<i>White</i>	<i>Nonwhite</i>	
Kent County	63.4	81.9	25.0	
Queen Anne's County	42.3	59.5	4.9	
Combined	52.6	70.3	14.8	
	<i>General hospital facilities</i>			
<i>Institution</i>	<i>Location</i>		<i>Beds</i>	
Kent and Queen Anne's General Hospital	Chestertown		25	

Geographic considerations

Kent County lies immediately south of Cecil County with the Sassafras River making up about four fifths of the common boundary. It is bounded on the west by the Chesapeake Bay, on the south by the Chester River, which serves as about three fourths of a common boundary of Kent and Queen Anne's counties, and on the east by the State of Delaware. The County, with a land area of 284 square miles, ranks twentieth in the State in this respect.

Queen Anne's County, lying south of Kent County, has the Chesapeake Bay to the west, Talbot County to the south, and Caroline County and the State of Delaware to the east. With a land area of 373 square miles, it ranks fifteenth among the counties of the State.

The boundaries between Queen Anne's and Talbot counties and between Queen Anne's and Caroline counties do not appear to have a physiographic basis.

The surface of Kent and Queen Anne's counties is generally flat.

Population

The population of Kent County was 13,071 and of Queen Anne's County 12,194 in 1943, making a total of 25,265. The distribution of the population of the area according to election districts, as of 1940, was as follows:

Kent County

District 1, Masseys.....	2,295
District 2, Kennedyville.....	1,854
District 3, Worton (Betterton).....	1,671
District 4, Chestertown.....	2,920
District 5, Edesville.....	2,738
District 6, Fairlee.....	1,067
District 7, Pomona.....	920

Queen Anne's County

District 1, Dixon.....	2,034
District 2, Church Hill.....	1,809
District 3, Centreville.....	3,287
District 4, Kent Island.....	2,094
District 5, Queenstown.....	2,813
District 6, Ruthsburg.....	1,163
District 7, Crumpton.....	1,276

As of 1943, Kent County had a density of 46 persons per square mile and Queen Anne's County had 32.7 persons per square mile, the counties ranking eighteenth and twentieth, respectively, in the State. The density for the entire area, 38.5 persons per square mile, indicates this area is sparsely populated. There are no large communities in either county. Chestertown, the County Seat of Kent County, has the largest population concentration in the area. In 1940 its population was 2,760. Centreville, the County Seat of Queen Anne's County, had a population of 1,141 in 1940.

Nonwhite persons, numbering 7,617, made up 30.1% of the total population of the area in 1940. There was no change in this percentage between 1940 and 1945.

Within a radius of 12½ miles around Chestertown, the location of the Kent and Queen Anne's General Hospital, all but 2,300 residents of Kent County are located. The latter live in the eastern extremity of the County. More than one half of the residents of Queen Anne's County live within the 12½-mile radius of the hospital. The residents of the southern and eastern

portions of the County, totaling 8,150 people, live outside the radius.

The residents of Kent County were classified in 1940 as 20.5% urban, 48.3% rural nonfarm, and 31.2% rural farm. The residents of Queen Anne's County were classified as being 50.8% rural nonfarm and 49.2% rural farm. For the two counties combined the classification was 9.9% urban, 49.6% rural nonfarm, and 40.6% rural farm.

Transportation

The entire area is served by highways which make access to Chestertown convenient. The Pennsylvania Railroad maintains service into both counties. This service is supplemented by bus lines.

Industry and commerce

Farming is one of the principal sources of income. There are no large industries in the entire area. A manufacturer of detonators and fuses and three canning factories offer employment in this area.

The per capita income of Kent County in 1940 was \$577.27, making it the eighth county in the State from this standpoint. In 1945 the per capita income was \$1,209.85, raising the County's rank to sixth in the State. Queen Anne's County in 1940 had a per capita income of \$372.82, making it the eighteenth county in the State. In 1945 the per capita income was \$901.34, the County climbing to twelfth place in this respect.

Physicians

There are 18 physicians practicing in Kent County and eight in Queen Anne's County. They are distributed follows:

<i>Kent County</i>		<i>Queen Anne's County</i>	
Chestertown.....	11	Centreville.....	3
Still Pond.....	1	Stevensville.....	2
Millington.....	3	Church Hill.....	1
Rock Hall.....	1	Sudlersville.....	1
Betterton.....	1	Queenstown.....	1
Galena.....	1		

On the basis of their 1943 population, Kent County had one physician for every 726 residents and Queen Anne's County, one physician for every 1,524 residents. Combining the populations of the two counties there was one physician for every 972 persons.

GENERAL HOSPITAL FACILITIES

KENT AND QUEEN ANNE'S GENERAL HOSPITAL

The Kent and Queen Anne's General Hospital, located in Chestertown, is the only general hospital in the area. Centrally located in the area, it was built with funds supplied by residents of both counties and put into service in 1935.

A Board of Directors, consisting of 15 members, is in charge of the institution. The members of this Board serve for a term of one year. The Board is self-perpetuating.

The Kent and Queen Anne's Hospital Auxiliary, an organization of several hundred women members, engages in enterprises to raise money for equipment and supplies.

Area served: Ninety-seven and nine-tenths of the patients served by this hospital are residents of the two counties.

Bed capacity: At the time of the survey, 31 beds were in use. The normal bed capacity of the hospital is 25. The six extra beds are reserved for nonwhite patients. Ten bassinets are in use.

Utilization: A classification of the discharged patients by diagnosis was as follows:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	130	12.1
Surgical	693	64.6
Obstetric	208	19.4
Orthopedic	16	1.5
Pediatric	26	2.4
Totals	1,073	100.0

The occupancy rate, based on the normal bed capacity, was 69.2%. Based on the bed complement, it was 55.8%. The average length of stay per patient was 5.9 days.

Medical staff: The Medical Staff is organized, having elected officers. Appointment to the Staff is made by the Board of Directors on recommendation of the Staff. Privilege to do major surgery is granted on the same qualification required for Fellowship in the American College of Surgeons, or on the basis of certification by the Surgical Specialty Board, or equivalent training in postgraduate work.

Personnel: Twenty-one full-time employees make up the personnel of the hospital. This establishes a ratio of 0.8 employee per bed.

Educational activities: No educational program is being conducted by this hospital.

Conclusions

This area has sufficient population to qualify as an intermediate area. On the basis of United States Public Health Service standards, 100 beds would be needed. There is no apparent need for a hospital of 100 beds. It was considered, therefore, as a rural area.

The length of stay of patients in the Kent and Queen Anne's General Hospital is short, being only 5.9 days. The rate of occupancy, based on the number of beds in use, is 55.8% which is not high.

It was reported that at times there is a list of patients waiting for admission to the hospital. In the light of the moderate occupancy rate, occasions when there are waiting lists are apparently at peaks throughout the year. However, they are not indicative of a steady demand for beds in excess of the capacity of the hospital.

On the basis of 2.5 beds per 1,000 population, this area would be entitled to 63 beds, or 38 more than the present normal bed capacity. The addition of these 38 beds would relieve the recurring periods of crowding.

Recommendations

It is recommended that Kent and Queen Anne's counties be classified as a single rural area.

It is recommended also that 38 beds be allocated to this area.

MONTGOMERY AND PRINCE GEORGE'S COUNTIES

INTERMEDIATE AREA NUMBER 4

<i>Population</i>	<i>Change from previous period</i>		<i>Change over 1920</i>	
1943: 221,780	48,378 increase		183.4% increase	
1940: 173,402	64,101 increase		121.5% increase	
1930: 109,301	31,033 increase		39.6% increase	
1920: 78,268				
	<i>Nonwhite population</i>		<i>Per cent nonwhite</i>	
	1945	1940	1945	1940
Montgomery County	11,040	8,926	10.6	10.6
Prince George's County	21,408	16,273	18.2	18.2
Combined	32,448	25,199	14.6	14.5
	<i>Per capita income</i>			
	1945		1940	
Montgomery County	\$860.57		\$524.67	
Prince George's County	\$789.90		\$487.99	
	<i>Classification of residents, 1940</i>			
	<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>	
Montgomery County	9.1%	74.1%	16.8%	
Prince George's County	20.5%	62.4%	17.1%	
Combined	15.0%	68.0%	17.0%	
	<i>Land area</i>	<i>Population per square mile, 1943</i>		
Montgomery County	494 square miles	210.8		
Prince George's County	485 square miles	242.5		
Combined	979 square miles	226.5		
	<i>Population</i>			
<i>County seat</i>	1940	1930		
Montgomery County: Rockville	2,047	1,460		
Prince George's County: Upper Marlboro	565	420		
	<i>Births in hospitals as per cent of total births, 1945</i>			
	<i>Total</i>	<i>White</i>	<i>Nonwhite</i>	
Montgomery County	91.2	93.7	64.5	
Prince George's County	89.4	94.6	60.9	
Combined	90.3	94.2	62.1	
	<i>General hospital facilities</i>			
<i>Institution</i>	<i>Location</i>		<i>Beds</i>	
Montgomery County General Hospital	Olney		40	
Suburban Hospital	Bethesda		102	
Washington Sanitarium and Hospital	Takoma Park		188	
Eugene Leland Memorial Hospital	Riverdale		87	
Prince George's General Hospital	Cheverly		102	
Warren Hospital	Laurel		17	

Geographic considerations

Montgomery and Prince George's counties encircle the District of Columbia. Montgomery County is the westernmost of the two counties. It is bounded by Howard and Frederick counties on the north and by the Potomac River on the west and south. The eastern boundary is common to the District of Columbia and Prince George's County.

Prince George's County is bounded by Montgomery County, the District of Columbia, and the Potomac River on the west, by Charles County on the south, and Anne Arundel and Calvert counties on the east and northeast. It touches Howard County for a short distance on the north.

The surface of both counties is uneven and ranges from moderately high hills in the west where Montgomery County joins Frederick County to low rolling

hills in the eastern and southern parts of Prince George's County. The area of Montgomery County is 494 square miles, making it the fifth county in the State in size. Prince George's County has an area of 485 square miles, making it the sixth county in the State in size.

Population

The population of Montgomery County was 104,155 in 1943. With a density of 210.8 persons per square mile, it ranked third among the counties of the State. Prince George's County had a population of 117,625 in 1943. With a density of 242.5 persons per square mile, the County ranked sixth in the State.

Both counties are populated throughout, but the majority of people make up communities on the periphery of the District of Columbia. In the 23-year

period between 1920 and 1943, the population of the area increased 183.4%.

The population as of 1940 of Montgomery County was divided according to election districts as follows:

District 1, Laytonsville	1,813
District 2, Clarksburg	1,558
District 3, Poolesville	1,724
District 4, Rockville	5,995
District 5, Colesville	4,045
District 6, Darnestown	1,682
District 7, Bethesda	26,114
District 8, Olney	2,601
District 9, Gaithersburg	3,861
District 10, Potomac	1,828
District 11, Barnesville	1,735
District 12, Damascus	2,079
District 13, Wheaton	28,877

The population as of 1940 of Prince George's County was divided according to election districts as follows:

District 1, Vansville	1,923
District 2, Bladensburg	6,103
District 3, Marlboro	2,081
District 4, Nottingham	1,626
District 5, Piscataway	2,666
District 6, Spalding	7,605
District 7, Queen Anne	2,199
District 8, Aquasco	1,120
District 9, Surratts	2,200
District 10, Laurel	3,691
District 11, Brandywine	2,427
District 12, Oxon Hill	2,802
District 13, Kent	2,264
District 14, Bowie	3,600
District 15, Mellwood	1,960
District 16, Hyattsville	6,926
District 17, Chillum	10,864
District 18, Seat Pleasant	10,750
District 19, Riverdale	7,184
District 20, Lanham	1,758
District 21, Berwyn	7,711

The population for the area as a whole was classified in 1940 as 15.0% urban, 68.0% rural nonfarm, and 17.0% rural farm. It is assumed that the 48,378 new residents entering the area between 1940 and 1943 were largely attracted by employment in and around Washington. They were considered, therefore, to be preponderantly urban. With this addition to the urban population, the distribution is 33.5% urban, 53.2% rural nonfarm, and 13.3% rural farm.

The nonwhite population of the area was 32,448 in 1945, amounting to 14.6% of the total residents in the two counties.

Approximately 2,300 residents of Montgomery County and 1,600 residents of Prince George's County live more than 12½ miles from a hospital. Most residents, however, live within 12½ miles of more than one hospital.

Transportation

The entire area is covered by a network of highways which extend to all points of the counties.

Railroad and bus service offer convenient public transportation throughout the area. Both transportation and highway systems radiate from Washington, which is the trading and medical center and the place of employment for a large segment of the population.

Industry and commerce

Employment is largely in government work and service industries. No large basic industries are located in the area.

The per capita income for Montgomery County as of 1940 was \$524.67 and \$860.57 in 1945. Its position in the State was ninth in 1940 and fourteenth in 1945.

Prince George's County residents had a per capita income of \$487.99 in 1940 and \$789.90 in 1945. It was the twelfth county in the State in this respect in 1940 and nineteenth in 1945.

Physicians

There are 97 physicians residing in Montgomery County and 37 physicians in Prince George's County. Four out-of-state physicians practice in Montgomery County and seven in Prince George's County. The resident physicians are distributed as follows:

Montgomery County	Prince George's County
Silver Spring	Laurel
Kensington	Mt. Rainier
Bethesda	Berwyn
Takoma Park	Upper Marlboro
Damascus	Greenbelt
Gaithersburg	Hyattsville
Rockville	Cottage City
Chevy Chase	Riverdale
Glen Echo	Bowie
Dawsonville	Brentwood
Poolesville	College Park
Sandy Spring	District Heights
Laytonsville	Fairmont Heights
	Capital Heights
	Bladensburg
	Takoma Park

Using the 1943 population figures for the two-county area, this establishes a ratio of one resident physician to every 1,655 persons. Taking the counties separately, Montgomery County has one resident physician for every 1,074 persons, whereas Prince George's County has one for every 3,179 persons.

GENERAL HOSPITAL FACILITIES

Six hospitals serve the residents of this area. Three are located in each county. Four are located just outside the District of Columbia and one in Olney and one in Laurel. A community group in Silver Spring holds title to a plot of land and is engaged in efforts to raise funds for the construction of a hospital.

MONTGOMERY COUNTY GENERAL HOSPITAL

The Montgomery County General Hospital, located at Olney, was established in 1920. It is owned by a nonprofit corporation and operated by a Board of Directors. The Board consists of 18 members who are elected annually.

Special departments are set up, rendering service to obstetric, orthopedic, eye, ear, nose, and throat, and skin and cancer cases. The Women's Board, with a membership of 100, assists the institution financially and from time to time makes gifts of equipment and supplies.

Area served: For the period reported, 81.0% of the patients treated were from Montgomery County, 10.4%

from Howard County, 3.1% from Prince George's County, and 5.5% from other areas and out of the State.

Buildings: The buildings are not fire-resistant.

Bed capacity: The present capacity is 40 beds, ten of which are reserved for nonwhite patients. Fourteen bassinets are maintained.

Utilization: The rate of occupancy is 82.4%, and the average length of stay is 9.1 days.

For the period reported, patients fell into the following classifications, according to diagnosis:

	Number of patients	Per cent
Medical	275	21.1
Surgical	703	53.9
Obstetric	287	22.0
Orthopedic	39	3.0
Totals	1,304	100.0

Medical staff: The Staff consists of three physicians. In addition, 20 physicians are available for consultation and 25 others make up a Visiting Staff.

Personnel: The personnel consists of 29 employees, which establishes a ratio of 0.7 employee per bed.

Educational activities: There is no educational program in effect.

Building plans: This hospital has just completed a building program which included the enlargement of the dietary department. A recent drive for funds produced approximately \$60,000 for a new maternity department.

SUBURBAN HOSPITAL

The Suburban Hospital, located at Bethesda, was put into service in December, 1943. It was built under the Lanham Act. It is operated by the Suburban Hospital Association, which is a nonprofit corporation. Title is held by the United States Government.

The Managing Board consists of 15 members whose term of office is three years. A Women's Auxiliary of 322 members assists the hospital with voluntary services and makes purchases of necessary supplies and equipment.

It has full approval of the American College of Surgeons.

Area served: For the period reported, 77.9% of the patients were residents of Montgomery County, 43.5% of whom were residents of Bethesda and Chevy Chase. Seventeen and nine-tenths per cent were residents of Washington, D. C. The remainder were from other areas.

Buildings: The buildings are of brick and stone, but the hospital is not classified as fire-resistant because of the inflammable interior construction.

Bed capacity: The present capacity is 102 beds and 22 bassinets. Ten of the beds are reserved for nonwhite patients.

Utilization: The rate of occupancy is 53.7%, and the average stay is 9.1 days per patient. The patients

classified according to diagnosis, for the period reported, were as follows:

	Number of patients	Per cent
Medical	729	33.9
Surgical	741	34.4
Obstetric	480	22.3
Pediatric	74	3.5
Orthopedic	103	4.8
Contagious	24	1.1
Totals	2,151	100.0

Medical staff: The Medical Staff is organized and elects its own officers annually. Standing committees are Executive, Medical Records, Program, Library, Credentials, Internes and Residencies, Laboratory, Nutrition, and Outpatient. Membership on the Staff is granted by the Board of Trustees on recommendation of the Executive Committee of the Staff. Recommendation is based on demonstrated ability and some degree of limiting of practice to the specialty for which application is made. Sixty-nine physicians make up the Senior and Associate Staffs, while 128 physicians make up the Courtesy and Consulting Staffs. Staff services are set up in the various specialties. Twenty-eight members of the Staff hold Specialty Board certification.

Personnel: One hundred thirty-three employees make up the personnel, establishing a ratio of 1.3 employees per bed.

Educational activities: This hospital is approved for three mixed residencies. No other educational program is in operation.

Building plans: No building program is under consideration.

WASHINGTON SANITARIUM AND HOSPITAL

The Washington Sanitarium and Hospital, located at Takoma Park, was opened in 1907. It is owned by the General Conference of the Seventh Day Adventist Church and is operated by the Washington Sanitarium Association, Incorporated. The Managing Board has a membership of 12. Their term of office is two years.

It is approved for interne training. The nurses' school is State-approved.

Area served: Of the patients treated, 50% were from Montgomery County. It was reported that patients are admitted from a broad area, including points as far south as South Carolina and as far north as Pennsylvania.

Buildings: Buildings have been added from time to time, with the result that some are constructed of brick and stone, while others are of frame construction. The buildings are not considered fire-resistant.

Bed capacity: The normal capacity is 188 beds, but as of the date of the report 201 beds were in service, plus 30 bassinets. None of these beds is available for nonwhite patients.

Utilization: For the period reported, the classification of service by diagnosis was as follows:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	1,268	36.1
Surgical	911	26.0
Obstetric	710	20.2
Pediatric	21	0.6
Orthopedic	242	6.9
Nervous and Mental	244	7.0
Other	111	3.2
Totals	3,507	100.0

The rate of occupancy based on normal bed capacity was 90.3%. Based on bed complement it was 84.4%. The average length of stay per patient was 17.6 days.

Medical staff: The Medical Staff is organized, having staff officers and committees on Internes, Library, Program, and Membership. Appointments to the Active Staff are made by the Board of Trustees. The Active Staff is made up of eight members, all of whom are on a full-time salary basis. Appointments to the Courtesy Staff are made by the Board on recommendation of the Staff. The Courtesy Staff consists of 40 members and the Consulting Staff of ten members. Staff services are set up in medicine, surgery, obstetrics, radiology, and eye, ear, nose, and throat. The privilege to do major surgery is granted on the same basis as qualifications for Fellowship in the American College of Surgeons.

Personnel: Two hundred and seventy full-time and 73 part-time employees make up the personnel. Considering the part-time employees as being on half-time duty, this establishes a ratio of 1.6 employees per bed, on the basis of normal bed capacity.

Educational activities: As of the date of the survey, three internes were on duty; there were no residents. The nursing school had a student body of 84. The nursing school is affiliated with the Johns Hopkins Hospital for instruction in surgery and with the Children's Hospital in Washington, D. C., for instruction in pediatrics.

Building plans: This hospital reported a planned building program of \$900,000.00, which would result in the addition of 75 beds.

EUGENE LELAND MEMORIAL HOSPITAL

The Eugene Leland Memorial Hospital, located in Riverdale, is owned and operated by a proprietary corporation. Its activities are under the direction of a Board of five members whose terms of office are for one year. The hospital was established in 1942.

A group known as the Workers' Auxiliary of the Eugene Leland Memorial Hospital assists the hospital in social, educational, and spiritual activities.

Special departments are maintained for obstetric and pediatric services.

This hospital has provisional approval of the American College of Surgeons.

Area served: For the period reported, 76.9% of the patients were residents of Prince George's County. The remainder of the patients were from other areas, including Montgomery County and the District of Columbia.

Buildings: The exterior construction of the buildings is

of brick, but the interior construction is wood. The buildings are, therefore, not considered fire-resistant.

Bed capacity: This hospital reported a capacity of 87 beds.¹ None of these is available for nonwhite patients. Twenty-one bassinets are maintained.

Utilization: The rate of occupancy is 44.2%. The average length of stay per patient is 8.1 days. For the year reported, the patients fell into the following categories:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	550	31.4
Surgical	510	29.2
Obstetric	521	29.8
Pediatric	80	4.6
Orthopedic	75	4.3
Other	12	0.7
Totals	1,748	100.0

Medical staff: The Medical Staff of this hospital is a closed organization, consisting of the Malin Medical Group. This group of physicians render outpatient services and treat patients in the hospital. One of the physicians functions as Chief of Staff, in lieu of having elected staff officers.

Personnel: Eighty full-time employees and six part-time employees make up the personnel of this institution, establishing a ratio of 0.95 employee per bed.

Educational activities: No educational program is in operation at this hospital.

Building plans: Plans are under consideration for the construction of an outpatient department which will be under the direction of the Malin Medical Group.

PRINCE GEORGE'S GENERAL HOSPITAL

The Prince George's General Hospital, located in Cheverly, was opened in 1944. Built under the Lanham Act, it is leased from the Federal Government and operated by Prince George's County. Special departments are maintained for obstetric, pediatric, orthopedic, and eye, ear, nose, and throat services. A Board of 15 members directs the affairs of the hospital. These members serve for a period of three years. They are appointed by the Board of County Commissioners. The Prince George's General Hospital Guild, with a membership of 1,500, assists the hospital through fund-raising projects for the purchase of supplies.

Area served: It was reported that 96% of the patients are residents of Prince George's County.

Buildings: The buildings, which are new and modern, are considered fire-resistant.

Bed capacity: The normal capacity is 102 beds and 18 bassinets. This hospital reports that it does not have a policy opposed to the admission of nonwhite patients, but that, to date, it has been impossible to set aside beds for this purpose. Under a construction program which is planned, facilities will be made available for such patients.

Utilization: For the year reported this hospital's occupancy rate was 70.9%. The average length of stay

¹Since the completion of the survey, 21 beds in a separate building of the hospital and ten beds which had been assigned to children have been taken out of service.

per patient was 7.9 days. For the last seven months of operation the hospital's occupancy rate increased to 79.0%. Classification of patients for the year reported, according to diagnosis, was as follows:

	Number of patients	Per cent
Medical	713	21.4
Surgical	1,079	32.8
Obstetric	685	20.5
Orthopedic	153	4.6
Other	708	21.2
Totals	3,338	100.0

Medical staff: The Medical Staff is organized and has elected officers. Committees of the Staff function under the following titles: Executive, Credentials, Medical Records, Program, Clinical, Pathological, and Audit. Appointment to membership on the Staff is made by the Board of Directors upon recommendation of the Medical Staff. There are 40 physicians on the Active Staff, 102 on the Courtesy Staff, four on the Consulting Staff, and four on the Honorary Staff. By type of practice and staff position held, these men fall in the following categories:

Medicine.....	77	Otolaryngology.....	2
Surgery.....	36	Genito-urinary.....	2
Obstetrics.....	24	Neurosurgery.....	2
Pediatrics.....	4	Orthopedics.....	2
Anesthesia.....	4	Ophthalmology.....	2

Privilege to work in the specialties is limited to physicians meeting the high qualifications established.

Personnel: The personnel of this hospital is made up of 109 full-time employees and 31 part-time employees. This establishes a ratio of 1.2 employees per bed. There are also 27 volunteer workers.

Educational activities: Residents are employed in medicine, surgery, and obstetrics.

Building plans: Plans are under consideration to add 110 beds to this hospital. The County Medical Society, the Hospital Administration, and the County authorities are cooperating in this effort. The ultimate plan calls for the establishment of this hospital as the medical center for the entire County.

WARREN HOSPITAL

The Warren Hospital, located at Laurel, is owned and operated by two physicians. It was opened in 1940.

Area served: All of the patients are residents of the immediately surrounding area.

Buildings: The buildings, which are 46 years old, are of frame construction.

Bed capacity: Seventeen beds make up the normal capacity. No beds are reserved for nonwhite patients.

Utilization: For the period reported, the hospital had an occupancy rate of 94.4% and had an average length of stay per patient of 12.2 days. The patients fell into the following classifications according to diagnosis:

	Number of patients	Per cent
Medical	103	21.5
Surgical	218	45.5
Obstetric	158	33.0
Totals	479	100.0

Building plans: The owners reported that at some future time they plan to replace the present buildings with a modern structure which will have a capacity of approximately 40 beds. Because of its type of structure, this hospital was not considered acceptable.

Conclusions

Montgomery and Prince George's counties, being homogeneous and lacking a clear line of demarcation for purposes of defining hospital service areas, were treated as one area. Located around the District of Columbia, with a combined population of 221,780, they qualify as an intermediate area.

Most of the area's employment is in government work and in service industries, which can be expected to be reasonably steady. No significant changes in the area's population are anticipated.

The six hospitals in this area maintain 536 beds, or a ratio of 2.4 beds per 1,000 population. Seventeen of these beds, located in the Warren Hospital at Laurel, are considered unacceptable because of the type of building and the material of which it is constructed. Twenty-one beds at the Eugene Leland Memorial Hospital were taken out of service after the survey was completed. The area should be allowed 21 beds as replacements. The net number of beds considered acceptable was, therefore, 519.

On the basis of the standard for intermediate areas of 4.0 beds per 1,000 population, this area is entitled to 887 beds. The differential of 368 beds is considered the normal need.

The Montgomery County Hospital at Olney has plans for a construction program to include the addition of 16 beds. This hospital reported an occupancy rate of 82.4%, which is abnormally high for a hospital of its size. The 16 beds planned, therefore, are considered justified.

The Prince George's General Hospital at Cheverly is planning an addition which will increase its capacity by 110 beds to a total of 212. The hospital reported an occupancy rate of 70.9%, which is about normal for a hospital of its present capacity.

Since this hospital was put into service in 1944 and the figures reported were for a part of its first two years of service, it is assumed that the utilization for that period was lower than will be expected in the future.

The Administration is in the process of working out a plan to establish this hospital as the medical center for the entire County and to include public health facilities. Arrangements have been made with specialists from the District of Columbia to serve on the Staff.

Doubling the capacity is an unusually ambitious program, but it is considered practical in this case in view of its location in a growing suburb of Washington. Plans for its establishment as a medical center for the area, the cooperative interest of the County Medical Society, and the availability of specialists who are already a part of the Visiting Staff, along with the rapid rate of utilization of the hospital from the date of its opening, weigh in favor of the proposed addition. This hospital reported that it had no policy opposed

to the admission of nonwhite patients, maintaining that when adequate facilities are available, beds will be reserved for them. In the light of this report, it must be required that as a condition of participation in this program, at least 14.6% of the beds be reserved for nonwhite patients.

The Eugene Leland Memorial Hospital at Riverdale has a program for the establishment of an outpatient department, but no construction is contemplated which would increase the bed capacity. Being a proprietary hospital, it would not qualify for assistance under the Act.

The Washington Sanitarium and Hospital, located at Takoma Park, has projected plans for an addition which would increase its bed capacity by 75 beds. While this hospital would qualify otherwise, its policy of not admitting nonwhite patients eliminates it from participation in the program. Should this policy be changed before the ratio of existing beds for the area is reached, consideration may be given an application for a grant.

The Suburban Hospital at Bethesda did not report any projected building program. Its rate of occupancy, for the year reported, was 53.7%.

Warren Hospital at Laurel was considered unacceptable owing to its frame construction.

Because of the geographic position of this community and its population, a modern hospital is considered a necessity.

A community group in Silver Spring has acquired a site and accumulated some funds for the construction of a hospital. This is a densely populated area on the edge of the District of Columbia. The head of the community group stated that plans call for the construction of a hospital of 200 beds when the funds are available.

If funds in the amount needed for a 200-bed hospital cannot be raised within a reasonable period of time, it is planned to construct a hospital of as many beds as can be financed. This hospital will not be less than 100 beds.

Plans for the hospital at Silver Spring should be integrated with the Suburban Hospital at Bethesda, if at all possible.

Recommendations

It is recommended that Montgomery and Prince George's counties be classified as an intermediate area.

It is recommended that 368 general hospital beds, necessary to bring the number in existence up to the ratio of 4.0 beds per 1,000 population, be allocated to this area.

The reported construction programs are reasonable and their combined total falls within the number of additional beds allocated. As plans materialize, supported by sufficient construction funds, these programs should be considered for approval.

ST. MARY'S COUNTY

RURAL AREA NUMBER 4

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 17,877	3,251 increase	11.1% increase
1940: 14,626	563 decrease	9.2% decrease
1930: 15,189	[923 decrease	5.7% decrease
1920: 16,112		

<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 5,524	17.1	1945: \$255.06
1940: 4,725	32.3	1940: \$277.11

Classification of residents, 1940

<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
0.0%	44.0%	56.0%

Land area: 367 square miles

Population per square mile, 1943: 48.7

<i>County seat:</i> Leonardtown	<i>Population</i>
	1940: 668
	1930: 697

Births in hospitals as per cent of total births, 1945

<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
65.0	81.9	10.7

General hospital facilities

<i>Institution</i>	<i>Location</i>	<i>Beds</i>
St. Mary's Hospital	Leonardtown	45

Geographic considerations

St. Mary's County is the southernmost county of the Western Shore of Maryland. It is surrounded by water, with the exception of its northern boundary which is common with Charles County. The Wicomico River, which has the same name as a river on the Eastern Shore, and the Potomac River bound St. Mary's County on the west and south and separate it from Charles County on the west and Virginia on the south. The Chesapeake Bay makes up the eastern boundary and the Patuxent River is the northeastern boundary, separating it from Calvert County.

The surface is 367 square miles of flat land. It is the sixteenth county in size.

Population

The population, which was 17,877 as of 1943, is evenly distributed over the County with one concentration at Leonardtown. The population of Leonardtown was 668 as of 1940.

The population of the County decreased during the period from 1920 to 1940 by 9.2%. The 20-year loss was more than offset between 1940 and 1943, during which time a net increase of 11.1% over 1920 took place. This increase was due to military installations in the County, which are considered permanent. The population density as of 1943 was 48.7 persons per square mile, placing the County sixteenth in the State.

Nonwhite persons, numbering 5,524, made up 17.1% of the population in 1945.

In 1940 the residents were classified as 44.0% rural nonfarm and 56.0% rural farm.

The population in 1940 according to election districts was as follows:

District 1, St. Inigoes.....	1,880
District 2, Valley Lee.....	1,201
District 3, Leonardtown.....	2,704
District 4, Chaptico.....	1,645
District 5, Mechanicsville.....	1,778
District 6, Hillville	1,736
District 7, Milestown.....	2,110
District 8, Bay.....	1,287
District 9, St. George Island	285

Transportation

Highways run the length of the County from the southeast point of the land to the northwest. Branch roads extend to numerous points on the shores. There is one spur railroad extending into the north of the County for a short distance. Bus service is maintained to Leonardtown, the County Seat, which is west of the approximate center of the County.

Travel is convenient to Leonardtown, the location of St. Mary's Hospital. Surrounded by water, land travel out of the area is limited to the northwesterly direction to Charles County.

Leonardtown is 56 miles southeast of Washington and 86 miles south of Baltimore. In this respect it is quite isolated.

Industry and commerce

The Baltimore Association of Commerce does not list any manufacturers in this area.

The residents work primarily at farming and fishing. Others are employed in the service industries.

The Patuxent Naval Air Test Center located at Cedar Point, which lies east of Leonardtown at the junction of the Patuxent River with the Chesapeake Bay, is considered a permanent installation. A community has developed there. This is resulting in an improvement in the commercial life of St. Mary's County. The Naval personnel are served by government-owned medical facilities.

The per capita income in 1940 was \$277.11, making it the twenty-second county in the State in this respect. In 1945 it was \$255.06, making it the twenty-third county in the State in this respect.¹

Physicians

There are 12 physicians practicing in St. Mary's County. They are distributed as follows:

Leonardtown.....	4	Pearson.....	1
Great Mills.....	1	Charlotte Hall	1
Morganza.....	1	Drayden.....	1
Avenue.....	1	Chaptico.....	1
Oakley	1		

On the basis of its population in 1943, the County has one physician to every 1,490 persons.

GENERAL HOSPITAL FACILITIES

ST. MARY'S HOSPITAL

St. Mary's Hospital, located in Leonardtown, was opened in 1913. It is owned by a nonprofit corporation. The Board of Directors consists of eight members, seven of whom serve terms of three years. The President of the Women's Auxiliary is the eighth member and serves during her term of office, which is one year. Election of Board members is by vote at a community meeting of all persons having paid a minimum membership fee of \$2.00. A Ladies' Auxiliary has a membership of approximately 50. This organization gives general financial assistance to the hospital.

Area served: All patients served during the period covered by the report were residents of St. Mary's County.

Buildings: The original building, constructed in 1913 was built of inflammable material. In 1944, under the Lanham Act, a new building was erected as an attachment to the old building. Nonwhite patients are cared for in the latter building.

Bed capacity: The capacity of the combined buildings is 45 beds. Ten of these beds are reserved for nonwhite patients.

Utilization: The hospital is operating at an occupancy rate of 57.5%. The average length of stay per patient is 9 days. For the period reported, the patients were diagnosed as follows:

	Number of patients	Per cent
Medical	627	59.1
Surgical	192	18.1
Pediatric	242	22.8
Totals	1,061	100.0

¹See Appendix L, footnote 5.

Medical staff: The Medical Staff is not organized. Privilege to practice in the hospital is granted to all reputable medical doctors in the area. Seven have patients in this hospital regularly.

Personnel: The personnel is made up of 22 full-time employees, establishing a ratio of 0.5 employee per bed. Fourteen of these employees are furnished quarters in the hospital.

Educational activities: There is no educational program in effect at this hospital.

Conclusions

St. Mary's County, with a population of 17,877, qualifies as a rural area.

The new wing at the St. Mary's Hospital was constructed in 1944, but the old wing, which was of frame construction, was not vacated. The two units are attached. Nonwhite patients are cared for in the old building. This unit should be razed because it is unsatisfactory and a fire hazard.

Nonwhite obstetric patients are not admitted. While 65.0% of all births of St. Mary's County in 1945 occurred in hospitals, 81.9% of births to white mothers were in hospitals, whereas only 10.7% of births to nonwhite mothers were in hospitals.

St. Mary's Hospital is operating at 57.5% of capacity, with periods when it is crowded. A change of policy which would allow the admission of nonwhite obstetric patients would require additional beds.

On the basis of the standard for rural areas, 45 beds are needed. This is the present capacity of the St. Mary's Hospital. Since some of the present bed capacity would be lost with the demolition of the old building, 25 new beds should be allocated from the pool on condition that nonwhite obstetric patients be granted admission.

Recommendations

It is recommended that St. Mary's County be classified as a rural area and that 25 beds be allocated as an addition to the existing hospital.

SOMERSET COUNTY

RURAL AREA NUMBER 7

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 17,269	3,696 decrease	29.8% decrease
1940: 20,965	2,417 decrease	14.8% decrease
1930: 23,382	1,220 decrease	5.0% decrease
1920: 24,602		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 5,820	33.7	1945: \$816.49
1940: 7,061	33.7	1940: \$260.15
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
18.6%	51.1%	30.2%
<i>Land area: 332 square miles</i>		
<i>Population per square mile, 1943: 52.0</i>		
<i>County seat: Princess Anne</i>	<i>Population</i>	<i>1940: 942</i>
		<i>1930: 975</i>
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
48.5	76.4	13.3
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Edward W. McCreedy Memorial Hospital	Crisfield	38

Geographic considerations

Somerset County is the southernmost county of the Eastern Shore. It is bounded on the north by Wicomico County, from which it is separated partially by the Wicomico River. Extensions of the Chesapeake Bay make up its western boundary. The Pocomoke River, the southern boundary, separates the County from Virginia. Worcester County bounds it on the east.

It has 332 square miles of surface, making it the eighteenth county in the State in size. Its surface is flat.

Population

The population of Somerset County was 17,269 in 1943. This was 7,333 less than its 1920 population. The decrease in population has been continuous during

the 23-year period. With a population density in 1943 of 52 persons per square mile, the County ranked fourteenth in the State.

The largest community in the County is Crisfield, which had a population of 3,908 in 1940. The County Seat is Princess Anne, which had a population of 942 in 1940. There are no large unpopulated areas, the residents being distributed throughout the County. The largest concentration in 1940 was in the southern extremity around Crisfield.

In 1940, the residents were classified as 18.6% urban, 51.1% rural nonfarm, and 30.2% rural farm.

The distribution by election districts, as of 1940, was as follows:

District 1, West Princess Anne.....	2,046
District 2, St. Peters.....	747
District 3, Brinkleys.....	2,030
District 4, Dublin.....	1,396
District 5, Mount Vernon	1,058
District 6, Fairmount.....	908
District 7, Crisfield.....	4,208
District 8, Lawsons.....	1,810
District 9, Tangier.....	510
District 10, Smith Island.....	680
District 11, Dames Quarter.....	347
District 12, Asbury.....	1,454
District 13, Westover.....	973
District 14, Deal Island	1,048
District 15, East Princess Anne	1,750

In 1945 there were 5,820 nonwhite residents in the County, amounting to 33.7% of the total population.

Transportation

A main highway runs north and south the length of the County, connecting Crisfield and Princess Anne with Salisbury to the north. Lateral highways connect with Pocomoke City in the southern part of Wicomico County. Other secondary roads run to points on the Bay. The Pennsylvania Railroad has a line running into Crisfield paralleling the main highway to Salisbury. A branch of this railroad extends to Pocomoke City. Bus services are maintained daily to Crisfield and Princess Anne.

Industry and commerce

The principal occupations are fishing, farming, and canning. There are four canning factories, two clothing manufacturers, and one seafood equipment manufacturer in the County.

The residents of the northern portion of the County use Salisbury as their trading center, while the residents of the central section use Princess Anne, and of the southern section, Crisfield.

The per capita income in 1940 was \$260.15, making it the twenty-third county in the State in this respect. In 1945, it was \$816.49, placing the County seventeenth in the State.

Physicians

There are 17 physicians practicing in this County, and they are distributed as follows:

Marion Station	1	Princess Anne	5
Crisfield.....	8	Deal Island.....	1
Ewell.....	2		

Of these, 15 are in general practice, one in surgery, and one in anesthesia. Their average age is 56 years.

On the basis of the County's 1943 population, there was one physician for every 1,016 residents.

GENERAL HOSPITAL FACILITIES

EDWARD W. MCCREADY MEMORIAL HOSPITAL

The Edward W. McCready Memorial Hospital, located in Crisfield, was founded in 1923. It is a non-profit association, operated by a Board of Directors with a membership of 14. The members of the Board serve for life. Vacancies are filled by vote of the remaining members. A Junior Auxiliary Board and a Senior Auxiliary Board, each with a membership of 20, engage in fund-raising efforts for the benefit of the hospital.

Area served: For the period reported, 79.0% of the patients treated were residents of Somerset County, 15.7% were from Worcester County, and 5.2% were principally from the eastern shore of Virginia and Tangiers Island.

Building: The building is a two-story brick and stone structure. The interior is not fire-resistant.

Bed capacity: The normal bed capacity of this hospital is 38 beds and eight bassinets. Eight beds are reserved for nonwhite patients.

Utilization: The rate of occupancy for the period reported was 57.1%. The average length of stay per patient was 10.3 days. Of the County's total births, 76.4% of births to white mothers and 13.3% of births to nonwhite mothers were in hospitals.

For the year reported, the patients were diagnosed as follows:

	Number of patients	Per cent
Medical	162	21.3
Surgical	398	52.2
Obstetric	104	13.6
Pediatric	98	12.9
Totals	762	100.0

Medical staff: The Medical Staff is not organized. Privileges to work in the hospital are granted by action of the Board of Directors, after investigation of the applicant. Privileges to do surgery are granted by the Board of Directors upon presentation of satisfactory proof of experience and training.

Personnel: The personnel consists of 19 employees, making a ratio of 0.5 employee per bed. Eight employees are given quarters in the hospital.

Educational activities: There is no educational program in effect.

Building plans: The management of the hospital reported that building plans are under consideration for an addition which will include ten beds, along with laboratory and X-ray facilities.

Conclusions

Somerset County qualifies as a rural area. Its population has decreased over a period of 23 years. As of

1943 its population was 17,269. On the basis of the standard of 2.5 beds per 1,000 population for rural areas, this County would be entitled to 43 beds. Since the utilization of the existing hospital is largely by residents of the County and facilities are available at the Salisbury hospital just north of the northern boundary of this County, it is apparent that there is no urgent need for additional beds. This is especially true in the light of the fact that the rate of occupancy of the existing hospital is 57.1%. A project which will

bring about an improvement of service to the existing beds should be considered.

Recommendations

It is recommended that Somerset County be classified as a rural area. It is recommended also that five additional beds be allocated to this area in order to bring it up to the standard for rural areas, but that the project be placed low on the priority schedule.

TALBOT AND CAROLINE COUNTIES

INTERMEDIATE AREA NUMBER 6

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 32,237	4,096 decrease	12.4% decrease
1940: 36,333	363 increase	1.7% decrease
1930: 35,970	988 decrease	2.7% decrease
1920: 36,958		

	<i>Nonwhite population</i>		<i>Per cent nonwhite</i>	
	1945	1940	1945	1940
Caroline County	3,161	3,447	19.7	19.6
Talbot County	4,938	5,736	30.5	30.5
Combined	8,099	9,183	25.1	25.3

	<i>Per capita income</i>	
	1945	1940
Caroline County	\$1,054.28	\$473.42
Talbot County	\$1,380.67	\$584.75

<i>Classification of residents, 1940</i>			
	<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
Caroline County	0.0%	53.4%	46.6%
Talbot County	24.1%	40.1%	35.8%
Combined	12.5%	46.6%	41.0%

	<i>Land area</i>	<i>Population per square mile, 1943</i>
Caroline County	320 square miles	50.1
Talbot County	279 square miles	58.0
Combined	599 square miles	53.8

	<i>Population</i>	
<i>County seat</i>	1940	1930
Caroline County: Denton	1,572	1,604
Talbot County: Easton	4,528	4,092

<i>Births in hospitals as per cent of total births, 1945</i>			
	<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
Caroline County	54.4	70.2	6.2
Talbot County	62.4	90.0	6.3
Combined	58.4	79.5	6.8

<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Easton Memorial Hospital	Easton	87

Geographic considerations

Talbot and Caroline counties lie between Delaware on the east and the Chesapeake Bay on the west, with Queen Anne's County bounding the area on the north and Dorchester County on the south. No geographic barriers have been used for the northern boundaries. Talbot County, which is the western portion of the area, is separated from Dorchester County by the Choptank River, which is bridged at Cambridge. The River continues north and makes up about one half of the southern boundary between Caroline and Talbot

counties. The general contour of the surface of the two counties is flat. Caroline County has a land area of 320 square miles and ranks nineteenth in the State in this respect. With a land area of 279 square miles, Talbot County ranks twenty-first.

Population

The population of Caroline County was 16,047 in 1943. Talbot County had a population of 16,190 in the same year. Caroline County had 50.1 persons per square mile and Talbot County had 58.0 persons per

square mile in 1943, their respective ranks being fifteenth and thirteenth in the State. Both counties are thinly populated throughout.

The population of Caroline County according to election districts, as of 1940, was as follows:

District 1, Henderson.....	1,568
District 2, Greensboro.....	2,445
District 3, Denton.....	3,255
District 4, Preston.....	2,241
District 5, Federalsburg.....	3,348
District 6, Hillsboro.....	1,515
District 7, Ridgely.....	1,786
District 8, American Corner.....	1,391

The population of Talbot County according to election districts, as of 1940, was as follows:

District 1, Easton.....	7,733
District 2, St. Michaels.....	3,370
District 3, Trappe.....	3,034
District 4, Chapel.....	2,614
District 5, Bay Hundred.....	2,033

Easton is the largest community in the area with a population of 4,528 in 1940. Smaller concentrations of population occur at Federalsburg and Denton in Caroline County. The population for this area was almost static for the 20-year period between 1920 and 1940. A significant loss of population was experienced between 1940 and 1943, probably due to the fact that no war industries were located in the area.

In 1940, the residents of Caroline County were 53.4% rural nonfarm and 46.6% rural farm. At the same time, the residents of Talbot County were classified as 24.1% urban, 40.1% rural nonfarm, and 35.8% rural farm.

Nonwhite persons, numbering 8,099, made up 25.1% of the population of the two counties in 1945.

The hospital at Easton is the only facility in this area. Within a radius of 12½ miles from Easton the entire population of Talbot County and a portion of Caroline County are located. Outside the radius there are approximately 13,850 residents of Caroline County, on the basis of its population.

Transportation

Highways from Caroline County run into Easton or are connected with roads which do. The highways of Talbot County radiate from Easton, which is located at the approximate center of the County. The Pennsylvania Railroad has lines serving the two counties. Most of the traffic from the ferries at Matapeake and Love Point to the southern part of the Eastern Shore moves through Easton.

Industry and commerce

There are no heavy industries in this area. A high percentage of the residents are engaged in farming.

The Baltimore Association of Commerce listed a milk company, several manufacturers of buttons, and several canning companies as offering employment.

The income per capita of the residents of Caroline County for 1940 was \$473.42, making it the fourteenth

county in the State in this respect. In 1945, the income per capita rose to \$1,054.28, making it the tenth county in the State in this respect. The per capita income of the residents of Talbot County was \$584.75 in 1940, ranking it fifth in the State. Per capita income increased to \$1,380.67 in 1945, raising it to second county in the State in this respect.

Physicians

There are 13 physicians practicing in Caroline County. They are distributed as follows:

Federalsburg.....	2	Goldsboro.....	1
Denton.....	5	Greensboro.....	1
Preston.....	1	Ridgely.....	3

Their average age is 43 years. On the basis of the County's population in 1943, there was one physician for every 1,234 persons.

There are 21 physicians residing in Talbot County. In addition, five physicians whose residence is outside the County practice at the Easton Memorial Hospital.

The physicians are distributed as follows:

Easton.....	11	Royal Oak.....	3
Queen Anne.....	1	Trappe.....	2
St. Michaels.....	5	Tilghman.....	1

On the basis of the County's 1943 population, there was one resident physician for every 771 persons.

Combining the populations and physicians of the two counties, a ratio of one physician to every 948 residents is established.

GENERAL HOSPITAL FACILITIES

EASTON MEMORIAL HOSPITAL

The Easton Memorial Hospital was established in 1916. It is owned and operated by a nonprofit association. The Board of Trustees consists of 14 members whose terms are for one year. The Board is self-perpetuating. It has full approval of the American College of Surgeons. Its nursing school has State-approval.

Area served: An analysis of patients served shows the following: 46.5% reside in Talbot County, 21.3% in Caroline County, 13.5% in Queen Anne's County, and 4.7% in Dorchester County. Other areas account for the remaining 14%.

Buildings: The buildings have been in service for 30 years and are not considered fire-resistant.

Bed capacity: The normal capacity of this hospital is 87 beds and 16 bassinets. At the time of the survey, there were 108 beds and 25 bassinets in service. Normally 20 beds are reserved for nonwhite patients, but at the time of the survey 25 beds were in use.

Utilization: The rate of occupancy based on normal bed capacity was 90.4%; based on the bed complement it was 72.8%. The average length of stay per patient was 9.8 days. A breakdown of patients by diagnosis revealed the following:

	<i>Number of patients</i>	<i>Per cent</i>
Medicine	790	23.7
Surgery	644	19.3
Obstetrics	420	12.6
Pediatrics	552	16.6
Orthopedics	218	6.5
Gynecology	244	7.3
Urology	242	7.3
Eye, ear, nose, and throat	224	6.7
Totals	3,334	100.0

Medical staff: The Medical Staff is organized, having elected officers. Appointment to the Medical Staff is made by the Board of Directors on the recommendation of the Staff. Privilege to do major surgery is granted on the basis of the candidate's having had residency in surgery and a minimum of one year of experience.

Personnel: The personnel consists of 121 full-time employees and five part-time employees. On the basis of normal capacity, this establishes a ratio of 1.4 employees per bed. In addition, there are five volunteer workers.

Educational activities: A nursing school is conducted. The director of the training school is also the director of nursing services. At the time of the survey, 23 students were in training. Affiliations are established at the Johns Hopkins Hospital for training in pediatrics and at the Delaware State Hospital for training in psychiatry.

Building plans: This hospital reported a projected building program under which the addition of 100 beds is contemplated.

Conclusions

The area of Talbot and Caroline counties has sufficient population and income to support its own hospital facilities. The Easton Memorial Hospital, which now uses 108 beds, although its normal capacity is 87 beds, has under consideration plans to add 100 beds. The

area qualifies as an intermediate area on the basis of the projected hospital construction and the population of the combined counties.

The large segment of residents of Caroline County that lives more than 12½ miles from the nearest hospital is in need of a facility. The Caroline County Medical Society has committed itself to the support of a community health center to be located at Denton. The projected plan includes space for the public health facility and a small unit of approximately 15 beds.

Recommendations

It is recommended that Talbot and Caroline counties be classified together as an intermediate area. It should have 129 beds, in order to establish a ratio of 4.0 beds per 1,000 population. However, on account of its strategic location with relation to not only the immediate area but also the entire central portion of the Eastern Shore, it is recommended that 50 additional beds be allocated to this area from the pool, bringing the total allocation to 179 beds. Considering the normal bed capacity at the Easton Memorial Hospital against the allotment of 179 beds, there exists an unmet need of 92 beds.

The Easton Memorial Hospital has reserved 23% of its beds for nonwhite patients. Since the nonwhite population made up 25.1% of the total population of the area, as of 1945, it is required that this proportion be maintained in the apportionment of new beds.

It is recommended that a public health center be constructed at Denton, but that no hospital unit be included. This is in line with the opinion that a small facility is inefficient to operate, cannot easily secure qualified personnel, and frequently has difficulty in screening patients for the purpose of limiting admissions according to its limited facilities. Ambulance service from Caroline County to the hospital at Easton will bring the residents within a safe time limit of adequate facilities.

WASHINGTON COUNTY INTERMEDIATE AREA NUMBER 2

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 69,890	1,052 increase	17.1% increase
1940: 68,838	2,956 increase	15.3% increase
1930: 65,882	6,188 increase	10.4% increase
1920: 59,694		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 1,817	2.6	1945: \$1,160.51
1940: 1,790	2.6	1940: \$ 578.71
Classification of residents, 1940		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
47.2%	34.6%	18.2%
<i>Land area:</i> 462 square miles		
<i>Population per square mile, 1943:</i> 151.3		
<i>County seat:</i> Hagerstown	<i>Population</i>	1940: 32,491
		1930: 30,861
Births in hospitals as per cent of total births, 1945		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
71.6	71.7	62.5
General hospital facilities		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Washington County Hospital	Hagerstown	142
Fleming Eye, Ear, Nose and Throat Hospital (special)	Williamsport	26

Geographic considerations

Washington County lies between Pennsylvania on the north and West Virginia on the south, with Alleghany County on the west and Frederick County on the east. The eastern and western boundaries have been established along mountain ridges which, while they are crossed by highways, are natural barriers to convenient travel.

Its land area is 462 square miles, which makes it the eighth county in the State in size. Some portions of the County are hilly. The balance is suitable for farming. Large areas are used for agriculture and dairy farming.

Population

The population was 69,890 in 1943, which represented an increase of 17.1% over the County's population in 1920. With a density of 151.3 persons per square mile, the County ranks sixth in the State.

In 1940, the population of Hagerstown was 32,491, or 47.2% of the total for the County. It is the County Seat and is located at the approximate center of the County. In addition to Hagerstown, there were eight communities in the County having populations ranging from 404 to 1,772 in 1940. The largest of these was Williamsport, located southwest of Hagerstown on the Potomac River.

The entire County is populated, there being no large areas without inhabitants. As the distance from Hagerstown increases, however, the density of population decreases. Map 2 shows that 60,000 people reside within a 12½-mile radius of Hagerstown. Approximately 5,000 residents in the western extremity and 4,000 in the southern portion live beyond the 12½-mile radius.

Nonwhite persons, numbering 1,817, made up 2.6% of the population in 1945.

The population of Washington County according to election districts, as of 1940, was as follows:

District 1, Sharpsburg	1,813
District 2, Williamsport	3,127
District 3, Hagerstown	6,125
District 4, Clear Spring	1,735
District 5, Hancock	2,988
District 6, Boonsboro	2,339
District 7, Cavetown	2,044
District 8, Rohrsersville	1,366
District 9, Leitersburg	1,288
District 10, Funkstown	1,889
District 11, Sandy Hook	1,428
District 12, Tilghmanton	1,618
District 13, Conococheague	1,729
District 14, Ringgold	1,662
District 15, Indian Spring	1,566
District 16, Beaver Creek	1,085
District 17, Hagerstown	4,932
District 18, Chewsville	1,230
District 19, Keedysville	945
District 20, Downsville	856
District 21, Hagerstown	5,702
District 22, Hagerstown	6,102
District 23, Wilsons	1,074
District 24, Hagerstown	4,687
District 25, Hagerstown	7,739
District 26, Halfway	1,769

In 1940, the residents were classified as 47.2% urban, 34.6% rural nonfarm, and 18.2% rural farm.

Transportation

Highways and railroads converge in Hagerstown from all parts of the County. The Baltimore and Ohio Railroad, the Western Maryland Railroad, the Pennsylvania Railroad, and the Norfolk-Western Railroad furnish rail service to Hagerstown. Local and long-distance bus lines furnish transportation to Hagerstown from all parts of the County and State.

Industry and commerce

There are numerous industries in Hagerstown. Manufactured products range from aircraft and pipe organs to clothing, machinery, and mineral products.

The only industries located outside of Hagerstown are two in Williamsport.

Other communities are small trading centers for the farm population.

The per capita income for Washington County was \$578.71 in 1940 and \$1,160.51 in 1945. In 1940 it ranked seventh among the counties of the State with respect to per capita income. In 1945 it was eighth in the State.

Physicians

The residents of Washington County have available the services of 65 physicians. They are distributed as follows:

Hagerstown	52	Clear Spring	2
Smithsburg	1	Boonsboro	2
Funkstown	1	Hancock	3
Sharpsburg	2	Williamsport	2

Their average age is 50 years. On the basis of 1943 population, the County had one resident physician for every 1,075 persons.

The Washington County Hospital reported a staff membership of 66. Three staff members live in Pennsylvania and one in Baltimore. The remaining 62 are from Washington County, which would indicate that all but three of the physicians of the County are affiliated with the hospital. Twelve physicians hold Specialty Board certification.

Classification of staff physicians by type of practice is as follows:

Medicine	41	Gynecology and	
Pediatrics	4	obstetrics	1
Pathology	1	Surgery	6
Dentistry	1	Roentgenology	2
Genito-urinary	1	Eye, ear, nose,	
Anesthesia	1	and throat	7
Orthopedics	1		

From the standpoint of medical services, Washington County is adequately supplied.

GENERAL HOSPITAL FACILITIES

WASHINGTON COUNTY HOSPITAL

The Washington County Hospital, located in Hagerstown, is owned and operated by the Washington County Hospital Association, a nonprofit association. It was organized in 1905.

It has specialized departments for obstetric, pediatric, orthopedic, eye, ear, nose, and throat, and skin and cancer services.

The American College of Surgeons has given this hospital full approval. Its nursing school has State-approval.

The Board of Trustees is made up of nine members whose terms are unlimited. When vacancies occur, due to resignation or death, the remaining members elect a successor.

A group of 120 women, known as the Ladies' Auxiliary, supplies linens and assists with the school of nursing.

Area served: During the year reported, 88.0% of the patients discharged were residents of Washington County, 8.7% were from Pennsylvania, and 2.0% from West Virginia. The remaining patients were from other counties and states.

Buildings: The buildings are of brick, stone, and steel construction. The most recent construction was completed in 1935.

Bed capacity: The normal capacity is 142 beds, but additional beds were installed as the demand occurred, until at present there are 185 beds in use. Ten beds are reserved for nonwhite patients. Forty-eight bassinets are in use.

Utilization: The rate of occupancy, based on the normal bed capacity, is 123.6%. For the period reported, the average length of stay per patient is 10.35 days.

Patients discharged were in the following classifications:

	<i>Number of patients</i>	<i>Per cent</i>
Medical	1,145	21.3
Surgical	2,292	42.6
Obstetric	990	18.4
Pediatric	576	10.7
Other	374	7.0
Totals	5,377	100.0

Medical staff: The Medical Staff is organized. Officers are elected annually. Standing committees function in the divisions of Medical Records, Internes, Residents, Laboratories, Surgery, and Obstetrics. There is also an Executive Committee which acts on Staff problems and a Joint Conference Committee which serves as liaison between the Staff and the Administration. Appointment to membership on the Staff is made annually by the Board of Trustees on recommendation of the Staff.

Privileges to do surgery or to work in the specialties are granted on the basis of Specialty Board certification, Fellowship in the American College of Surgeons, or three years of postgraduate work in the field.

Personnel: Two hundred and fifty-five full-time employees and two part-time employees make up the personnel. This is a ratio of 1.8 employees per bed, on the basis of the normal bed capacity.

Educational activities: At the time of the field survey, efforts were underway to obtain approval for training internes and residents. It was reported later that such approval had been granted as of December 8, 1946.

The nursing school has full State-approval. Fifty-two students are now in training. Affiliation is maintained with Sheppard and Enoch Pratt Hospital in Baltimore for training in psychiatry.

While there is no formal course offered, students have been accepted in the laboratories. Some of these students were certified later as registered laboratory technicians.

Building plans: The administrator reported the following building program considered as desirable and practical:

1. One-story addition to third floor Administration Building, south extension, for a modern pediatric unit with solarium above serving the fourth floor.
2. One-story addition to third floor Administration Building, north extension, to provide expansion of laboratory and X-ray facilities, solarium above serving the fourth floor.
3. Nurses' residence and education building, 100 to 125 beds.
4. Power house and equipment with capacity for long-range plan.
5. An addition with a capacity of 100 hospital beds.

Items 1 and 2 would release areas which could provide about 25 additional beds, making a total increase of 125 beds. Additional space would be provided for the operating room suite by relocating delivery and labor rooms in the 100-bed addition. This would provide a better emergency room, physical therapy facilities, and administrative offices.

The Hospital rents to the County Health Department a building adjoining the Administration Building. This building contains only about one half of the space needed.

Sufficient land owned by the Hospital is available for all of the present and long-range planning. When practicable, the Hospital will acquire residences in the area to meet the needs of employees. Lack of these facilities has hampered the recruitment of employees.

FLEMING EYE, EAR, NOSE AND THROAT HOSPITAL

This hospital had a capacity of 26 beds and was privately owned and operated. It was established in 1943. Work was limited to the field of eye, ear, nose, and throat.

Since completion of the field survey, this hospital has been closed. Considerable work had been done originally in converting it from a dwelling to a hospital, and it is probable that it will be reopened as a hospital. Because of this potentiality, some details are included herein.

Area served: Sixty per cent of the patients were residents of the local area. Approximately 5% were residents of Maryland outside the local area. Thirty-five per cent were residents of West Virginia and Pennsylvania. Some physicians from Pennsylvania and West Virginia, who referred cases to this hospital, assisted Dr. Fleming with the work. For the period reported,

the occupancy rate was 35.8% and the average length of stay per patient was 4 days.

Building: While the construction is of inflammable materials, and the original building quite old, the hospital has been renovated and is modern in appearance.

Conclusions

Hagerstown is the trading and medical center of the County. It is easy of access from all points.

The County meets all qualifications as an intermediate area. The standard for intermediate areas of 4.0 beds per 1,000 population justifies a total of 280 general hospital beds in the County.

The differential between the normal bed capacity and the standard requirements is 112 beds. With 26 beds at the Fleming Eye, Ear, Nose and Throat Hospital out of service and 43 extra beds already in use in the Washington County Hospital, this area must be given a high priority.

Should the Fleming Hospital be converted to other uses, the allotment to this area will be increased by 26

beds if sufficient local matching funds are made available.

Because of its diversity of industries balanced with a large population of farmers, the economy of the area is believed stable.

Seventy-one and six-tenths per cent of all births in the County were in hospitals, indicating a general acceptance of hospitals by the public. Seventy-one and seven-tenths per cent of births to white mothers were in hospitals and 62.5% of births to nonwhite mothers were in hospitals.

Recommendations

It is recommended that Washington County be classified as an intermediate area.

It is recommended also that 112 beds be installed as an addition to the Washington Hospital.

Since nonwhites make up 2.6% of the population of this County, it would be required that three of the new beds be reserved for the use of nonwhite patients. Inasmuch as ten beds already are reserved for nonwhites the new beds need not be specifically assigned.

WICOMICO COUNTY

INTERMEDIATE AREA NUMBER 8

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 32,960	1,570 decrease	17.0% increase
1940: 34,530	3,301 increase	22.6% increase
1930: 31,229	3,064 increase	10.9% increase
1920: 28,165		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 7,152	21.7	1945: \$1,316.20
1940: 7,495	21.7	1940: \$ 617.09
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
38.6%	32.1%	29.4%
<i>Land area: 380 square miles</i>		
<i>Population per square mile, 1943: 86.7</i>		
<i>County seat: Salisbury</i>	<i>Population</i>	1940: 13,313
		1930: 10,997
<i>Births in hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
69.8	82.4	33.9
<i>General hospital facilities</i>		
<i>Institution</i>	<i>Location</i>	<i>Beds</i>
Peninsula General Hospital	Salisbury	177

Geographic considerations

Wicomico County lies around the southwest corner of the State of Delaware. Its entire northern boundary is common with Delaware. A small projection of the County runs north between the western boundary of Delaware and the eastern boundary of Dorchester

County. Almost the entire western boundary of the County is made up of the Nanticoke River, which separates it from Dorchester County. Wicomico County lies north of Somerset County and is partially separated from it by the Wicomico River. The County's surface is generally flat. With a land area of 380 square

miles, it ranks fourteenth among the counties of the State.

Population

The population of this County in 1943 was 32,960. An increase of 22.6% was experienced between 1920 and 1940; however, a reversal of trend was experienced between 1940 and 1943, when a loss of 4.5% was recorded.

The population is concentrated largely in and around Salisbury, which is the County Seat. It serves as the principal trading center for this and the surrounding counties, and for a part of the State of Delaware.

The entire County is populated, there being no large vacant areas. The population density in 1943 was 86.7 persons per square mile, making it the ninth county in the State in this respect.

Nonwhite persons, numbering 7,152, made up 21.7% of the population in 1945.

The population distribution in the County by election districts was reported in 1940 as follows:

District 1, Barren Creek.....	1,595
District 2, Quantico.....	931
District 3, Tyaskin.....	1,263
District 4, Pittsburg.....	1,478
District 5, Parsons.....	6,861
District 6, Dennis.....	737
District 7, Trappe.....	940
District 8, Nutters.....	1,094
District 9, Salisbury.....	5,106
District 10, Sharptown.....	1,173
District 11, Delmar.....	2,009
District 12, Nanticoke.....	1,485
District 13, Camden.....	5,585
District 14, Willards.....	1,234
District 15, Hebron.....	1,385
District 16, Fruitland.....	1,654

In the same year the residents were classified as 38.6% urban, 32.1% rural nonfarm, and 29.4% rural farm.

Transportation

Salisbury is the hub of the highways and railroads of this part of the State. From Salisbury they radiate to the principal communities in Worcester, Somerset, and Dorchester counties and run north to Philadelphia. Bus service is maintained to most of the surrounding communities.

Industry and commerce

Eighteen manufacturing plants are located in this County, principally in Salisbury. Six of these manufacture shirts and four operate canneries.

Salisbury is the center of the large poultry-raising and vegetable-growing businesses. In 1940 its population was recorded as 13,313.

Physicians

There are 36 physicians residing in Wicomico County. They are distributed as follows:

Salisbury.....	29	Mardela.....	1
Fruitland.....	2	Hebron.....	1
Delmar.....	1	Willards.....	1
Sharptown.....	1		

Their types of practice are as follows:

General medicine.....	18	Eye, ear, nose,	
Obstetrics.....	4	and throat.....	4
Pediatrics.....	3	Surgery.....	6
Tuberculosis.....	1		

Their average age is 43 years. On the basis of the County's population in 1943, there was one resident physician for every 916 patients. In addition, one physician from Delmar, Delaware, practices in the County.

GENERAL HOSPITAL FACILITIES

PENINSULA GENERAL HOSPITAL

The Peninsula General Hospital, located in Salisbury, was founded in 1903. It is operated by a non-profit association. Its Board of Directors has a membership of 18, whose term of office is one year. Election to membership on the Board is by means of a public meeting held annually. The Junior and Senior Auxiliary Boards, with a total membership in the neighborhood of 90, are engaged in enterprises for the raising of funds which are used for the purchase of new equipment. Support is also given this hospital by the Kiwanis, Rotary, Lions, and Elks Clubs. From time to time, other clubs and church organizations throughout the County make contributions.

This hospital is fully approved by the American College of Surgeons. It conducts a State-approved school of nursing.

Area served: On the basis of the period reported, 55.3% of the patients treated were from Salisbury and Wicomico County; 20.0% from Worcester County; 8.7% from Somerset County; and the remainder from other states, including Delaware and Virginia.

Building: The building is constructed of brick and stone and is classified as fire-resistant. Additions to the building were made in 1920 and 1938.

Bed capacity: The normal capacity is 177 beds. Thirty beds are reserved for nonwhite patients.

Utilization: The rate of occupancy was 74.2%, and the average length of stay per patient was 8.1 days. Of the births occurring in this County, 69.8% were in hospitals; 82.4% of births to white mothers and 33.9% of births to nonwhite mothers occurred in hospitals.

For the year reported, the patients were diagnosed as follows:

	Number of patients	Per cent
Medical	903	15.3
Surgical	1,819	30.8
Obstetric	1,929	32.6
Pediatric	856	14.5
Other	405	6.8
Totals	5,912	100.0

Medical staff: The Medical Staff is organized and has elected officers. Membership to the Staff is granted by the Board of Directors on recommendation of the Staff. Privilege to do major surgery is granted by the Board on the basis of Specialty Board certification, or a minimum of two years of postgraduate training at an approved institution.

Personnel: The personnel is made up of 172 full-time and three part-time employees, establishing a ratio of 0.98 employee per bed.

Educational activities: At the time of the survey, two internes and two residents were employed on a one-year rotating basis.

As of the date of the survey, 38 students were in training. The school affiliates with Johns Hopkins Hospital for training in pediatrics and with Sheppard and Enoch Pratt Hospital for training in psychiatry.

Building plans: This hospital reports a projected building program which would include the addition of 100 new beds, a new boiler house and a nurses' home. The estimated cost at the time of reporting was \$800,000.

Conclusions

On the basis of a population of 32,960 and with a hospital having more than 100 beds, this area fully qualifies as an intermediate area. The standard of 4.0 beds per 1,000 population for intermediate areas would qualify this area for 132 beds. It already has 177 beds. However, the official population of this County does not reflect the true picture of the population served by the Peninsula General Hospital.

Salisbury is the marketing center for Wicomico and the surrounding counties and for the southern portion of Delaware. Travel and freight hauling through this area contributes to the need for hospital facilities.

In spite of the fact that the number of existing beds is already in excess of not only the standard for an intermediate area, but also of the State standard of 4.5 beds per 1,000 population, the rate of occupancy in Peninsula General Hospital is high. This is a reflection of the number of people who depend on this hospital for service. The short length of stay reported is indicative of the rapid turnover of patients resulting from pressure to get other patients admitted. Therefore, it was concluded that the need for beds in this area is greater than normal and that an allocation of beds must be made from the pool.

Recommendations

It is recommended that this area be classified as an intermediate area and that 70 beds be allocated from the pool, bringing the bed capacity to 247. In order to maintain an equitable assignment of beds on the basis of the County's nonwhite population in 1945, it will be necessary that 15 of the new beds be reserved for nonwhite patients.

WORCESTER COUNTY

RURAL AREA NUMBER 6

<i>Population</i>	<i>Change from previous period</i>	<i>Change over 1920</i>
1943: 19,201	2,044 decrease	13.9% decrease
1940: 21,245	379 decrease	4.8% decrease
1930: 21,624	685 decrease	3.1% decrease
1920: 22,309		
<i>Nonwhite population</i>	<i>Per cent nonwhite</i>	<i>Per capita income</i>
1945: 6,029	31.4	1945: \$1,347.48
1940: 6,670	31.4	1940: \$ 598.45
<i>Classification of residents, 1940</i>		
<i>Urban</i>	<i>Rural nonfarm</i>	<i>Rural farm</i>
12.9%	48.3%	38.8%
<i>Land area: 483 square miles</i>		
<i>Population per square mile, 1943: 39.8</i>		
<i>County seat: Snow Hill</i>	<i>Population</i>	1940: 1,926
		1930: 1,604
<i>Births of hospitals as per cent of total births, 1945</i>		
<i>Total</i>	<i>White</i>	<i>Nonwhite</i>
39.1	61.9	9.1

Geographic considerations

Worcester County is located in the southeastern corner of the State. In the east it fronts on the Atlantic Ocean. Its northern extremity is bounded by the State of Delaware on the north and Wicomico County on the west. The western extension is bounded on the north

by Wicomico County and on the west by Somerset County. On the south the boundary is common to Virginia.

The surface is flat and lends itself to farming. It is the seventh county in size in the State, having 483 square miles of land area.

Population

In 1943, Worcester County had a population of 19,201. This was the lowest point since 1920 when the population was recorded as 22,309. Since 1920 there has been a small decrease recorded in each decennial census, the total loss between 1920 and 1943 being 3,108, or 13.9%.

The nonwhite population, numbering 6,029, constituted 31.4% of the County's population, in 1945.

In 1943 the population density was 39.8 persons per square mile. In this respect, this County ranked twenty-first in the State.

As of 1940, the residents were classified as 12.9% urban, 48.3% rural nonfarm, and 38.8% rural farm.

The population was distributed in 1940, according to election districts, as follows:

District 1, Costens.....	4,311
District 2, Snow Hill.....	3,674
District 3, East Berlin	2,888
District 4, Newark.....	1,056
District 5, St. Martin.....	1,451
District 6, Colbourne	583
District 7, Atkinsons.....	704
District 8, Stockton.....	2,209
District 9, West Berlin.....	2,332
District 10, Ocean City.....	2,037

Transportation

A main highway, Route 113, crosses the County from the southwest to the northeast through Pocomoke City in the south, Snow Hill in the center, and Berlin in the north. Other highways, running from points on the coast and from Virginia in the south, cross the main highway at Pocomoke City, Snow Hill, and Berlin and extend to Salisbury in Wicomico County.

Bus and rail lines supply service between the communities in the County and to Salisbury.

Industry and commerce

Farming is the principal occupation, which includes poultry raising, fruit growing, and truck farming. Some residents find employment in canning factories.

The summer resort business centered around Ocean City is a source of income and employment.

During the harvest season transient labor is imported, supplying a source of business for the local merchants, but at the same time presenting social problems such as need for medical care and hospital facilities.

With a per capita income of \$598.45 in 1940, the County ranked fourth in the State. In 1945 the per capita income was \$1,347.48, making it the third county in the State in this respect.

Physicians

Fourteen physicians are located in the County. Their ages range from 28 to 68, with seven being 40 years of age or less. They are distributed as follows:

Ocean City	3
Berlin	4
Snow Hill	3
Pocomoke City.....	3
Stockton.....	1

One physician specializes in eye, ear, nose, and throat, and another in chests. All others are general practitioners.

The ratio of physicians to population is one to every 1,372 persons.

GENERAL HOSPITAL FACILITIES

At present there are no hospitals located in Worcester County. The Peninsula General Hospital at Salisbury reported that 1,186, or 20%, of its patients are residents of Worcester County.

Related to the total population of the County, this shows that one out of every 16 residents was a patient in the Salisbury hospital during the year. This ratio indicates a rather general education to the use of hospital facilities.

The relative distances between the principal communities in Worcester County and their distances from near-by hospitals are as follows:

Salisbury to Berlin.....	24 miles
Salisbury to Snow Hill.....	18 miles
Salisbury to Pocomoke City.....	26 miles
Pocomoke City to Snow Hill.....	13 miles
Snow Hill to Berlin.....	16 miles
Pocomoke City to Berlin	29 miles
Ocean City to Berlin	8 miles
Pocomoke City to Crisfield.....	26 miles

None of the residents of this County live within a 12½-mile radius of the hospitals at Salisbury or Crisfield.

Conclusions

With a population of nearly 20,000, Worcester County qualifies as a rural area. Ranking third in the State in per capita income, Worcester County should be able to support a hospital. This support will depend on the quality of service maintained as compared with service available at the hospital in Salisbury.

The distances to hospitals in Crisfield and Salisbury are not too great to travel for medical care since there are no difficult natural barriers, and highways are usually passable throughout the year.

The hospital at Salisbury is very busy, with an occupancy rate of 74.2% and an average length of stay per patient of 8.1 days, serving its local area and parts of the surrounding counties and part of the State of Delaware. It has projected an expansion program, which contemplates the addition of 100 beds which will relieve the present problems. A hospital located at either Snow Hill or Berlin would furnish some relief to the crowding at the Salisbury hospital.

The location of a hospital in Snow Hill would have the advantage of being almost midway between Berlin and Pocomoke City. Located at Berlin it would serve Ocean City and Snow Hill, but it would be 29 miles from Pocomoke City.

Snow Hill, therefore, would be the logical location for a hospital for Worcester County if funds and physicians and other personnel are available and if local support is given.

A committee of local citizens has organized for the purpose of building a hospital in Berlin. It is reported that some funds already have been raised for this purpose.

Some difficulty might be experienced in organizing a staff. It should be organized around the physicians now practicing in Snow Hill, Berlin, and Ocean City, with privileges extended to those in Pocomoke City. Some dependence would have to be placed on consultants coming from Salisbury.

Recommendations

It is recommended that Worcester County be classified as a rural area. On the basis of a rural area ratio of

2.5 beds per 1,000 population, it should have 48 beds. On account of the influx of summer vacationists and transient farm labor, it is recommended that 12 beds be allocated from the pool.

It is recommended that the hospital be located at Snow Hill. If sufficient funds cannot be raised to pay two thirds of the cost of the hospital at Snow Hill, there is no serious objection to locating it at Berlin.

The whole proposition of whether or not a hospital should be constructed in this County with the accompanying problems of staff and personnel should be weighed against the advantages of supporting the projected expansion at the Salisbury hospital.

Section 3. Regional Integration of Facilities

Hospitals generally have two spheres of service.

The first sphere is the local community comprised of the town or city in which it is located and the inhabitants of near-by residential areas. The extent of this immediate hospital service area is affected principally by the nearness of other communities which maintain hospitals with comparable facilities and medical staffs.

The second sphere extends beyond the immediate service area to include other communities whose hospital facilities and medical staff are limited to a narrower field. This broader field of service for the purposes of this survey was termed the "region" of service.

The nucleus of a region is the principal hospital in the area which meets the standards for a hospital in a district or base area. The designation as a base or district hospital may be given one or more hospitals fulfilling the requirements in a community.

A district hospital is one having more than 100 beds, departmental physical and staff organization, and effective standards sufficient to assure a high quality of service.

A base hospital is defined as one having a teaching program approved by the American Medical Association's Council on Medical Education and Hospitals, functioning in conjunction with a medical school, or one having a minimum of 200 general hospital beds, and offering at least two or more approved residencies.

The object of delineating regions was to establish a plan of integration of hospital facilities so that communities with limited service would know where to look for services not available locally.

After a study of the existing facilities along with geographical factors and trading and travel habits, the service areas were grouped into what were considered logical regions.

Each region was given the name of the community in which the base or district hospital facilities for the region were located.

Map 4 shows the regions as established.

Cumberland Region

The Cumberland Region includes Garrett and Allegany counties.

At present, there are no hospitals located in Garrett County, but one is planned to be established in Oakland. This hospital cannot be expected to care for more than medical, obstetric, and uncomplicated surgical cases. Services for X-ray interpretations and pathological diagnoses will have to be arranged either on a part-time basis or by reference.

Such services are available at the Memorial and the Allegany Hospitals in Cumberland.

The Reeves Clinic at Westernport limits its work to the field of eye, ear, nose, and throat. Residents from this area who require other services will travel to Oakland or to Cumberland, depending on the seriousness of their condition.

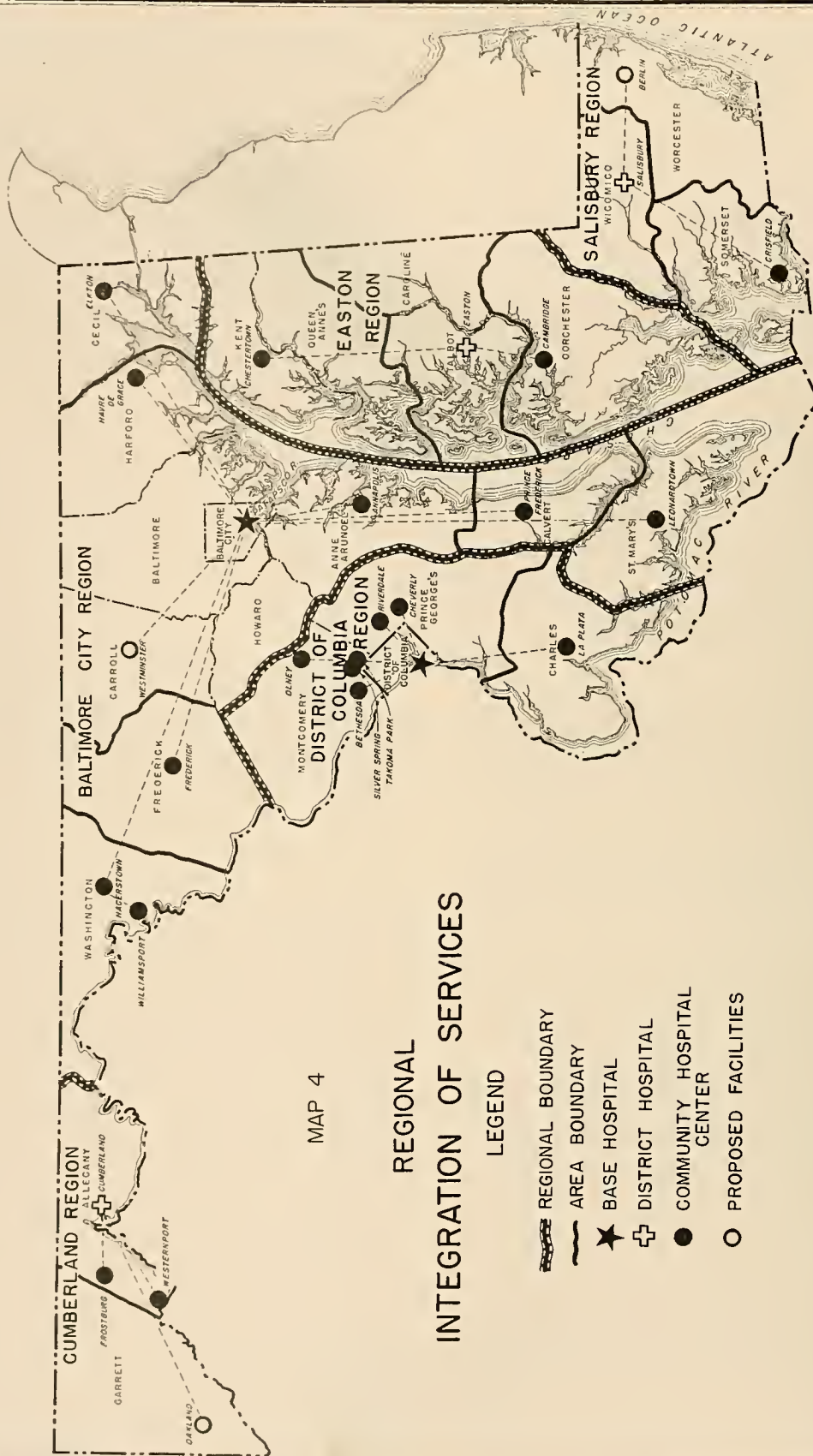
Miners Hospital at Frostburg has limited facilities, and the practice of going into Cumberland for major work already has been established.

Residents of the southern portions of Somerset and Bedford counties in Pennsylvania in the past have traveled to Cumberland for services outside the scope of their local hospitals. Records of the Cumberland hospitals show that many residents of northern West Virginia use the Cumberland hospitals.

Residents of the eastern section of Washington County use their local hospital at Hagerstown and travel to Baltimore for service not available locally, so this area was not placed in the Cumberland Region.

Allegany Hospital and Memorial Hospital, each having more than 100 beds, qualify as district hospitals.

It was concluded, therefore, that the Cumberland Region, consisting of Garrett and Allegany counties, logically and practically would constitute a region. It is expected, however, that there will be occasions when it will be necessary to refer patients to the base hospitals



in Baltimore for facilities and service of specialists not available in Cumberland.

Baltimore City Region

The Baltimore City Region, with Baltimore City as the regional base, was designed to include those areas which are totally dependent upon the hospital facilities of Baltimore City for service and those which look largely to Baltimore City for services which are not available locally. Included in the region, therefore, are the areas of Washington County, Frederick County, Cecil County, Calvert County, St. Mary's County, and the counties making up the Baltimore Base Area.

Each of the counties included in the region, but outside the Baltimore Base Area, has a hospital facility of limited service, making it necessary that certain types of cases be referred elsewhere.

In Baltimore City, the teaching hospitals, along with the other hospitals which are highly organized from the standpoint of physical arrangement, facilities, and medical staff, are in a position to render services not available in the outlying portions of the region.

The transportation and trading patterns for this area center in Baltimore, making it an integrated region.

For these reasons, the Baltimore City Region was delineated as described above.

District of Columbia Region

The District of Columbia Region includes the three counties of Maryland which lie in a semicircle around the District of Columbia. They are Montgomery, Prince George's, and Charles counties.

There is one hospital at La Plata in Charles County. Prince George's County has three hospitals and Montgomery County has three. The largest of these hospitals is the Washington Sanitarium and Hospital at Takoma Park.

This entire area has become densely populated primarily by reason of its proximity to the District of Columbia. Its travel and trading patterns radiate from the District of Columbia, and practically all endeavors are secondary to and dependent on activities in Washington.

In the District of Columbia there are several large hospitals with complete facilities which are in a position to fill the needs not available in the three counties. Because of the close relationship between the counties and the District of Columbia, they have been included in the District of Columbia Region as defined above.

Easton Region

The Easton Region was designed to include Kent, Queen Anne's, Talbot, Caroline, and Dorchester counties.

There are three hospitals in this region, the largest of which is the Easton Memorial Hospital, which is at the approximate center of this region. While the Easton Memorial Hospital at present has 87 beds, the additional facilities which are now contemplated by the hospital management will increase its capacity to 187 beds.

Highways and rail service connect Easton with the other communities in the region. It is the nearest community of importance to the eastern terminal of the Chesapeake Ferry lines.

It was concluded, therefore, that Easton is the logical point to designate as the location for the district hospital for the region.

Salisbury Region

The Salisbury Region consists of Somerset, Worcester, and Wicomico counties.

Almost all travel from these counties and from the southern extremity of the peninsula moves toward and through Salisbury.

The hospital at Salisbury, with 177 beds, is well organized. It has physicians practicing in the various specialties. A building program is contemplated which would increase its bed capacity.

Salisbury is the trading center of the area, which also includes the southern portion of Delaware.

For these reasons, the Salisbury Region was established as described above.

Chapter 7. TUBERCULOSIS HOSPITALS

SIX institutions in the State maintain services for the treatment of patients with a primary diagnosis of tuberculosis. Four of these are State-owned, and two are owned and operated by nonprofit organizations. In addition, one general hospital maintains a department for the treatment of tuberculous patients (Table H and Map 5).

These institutions maintain a total of 1,883 beds. The tuberculosis section of the *Baltimore City Hospitals* has a capacity of 280 beds. Of these, 140 reserved for nonwhite patients are not considered acceptable,¹ and therefore, have been excluded from the total. Of the 1,743 acceptable normal bed capacity, 1,194 beds are for white patients and 549 for nonwhite patients.

Summary of existing facilities

The State Sanatorium at Henryton, which is reserved for nonwhite patients, has space for 181 beds not in use. This total resulted from a count of beds actually out of service plus areas which were not previously used as bed space. Sixty-five of the beds out of service were in a new wing which is equipped and will be put into use when personnel can be found. A building which was constructed some years ago for child patients is out of service. If this building is remodeled for use as a children's hospital, it will have a capacity of about 40 beds. The balance of the space not in use is not equipped.

The State Sanatorium at Sabillasville, with a capacity of 523 beds, has only 442 beds in service. Due to a shortage of personnel, three pavilions were closed in April 1947, accounting for 60 of the beds out of service. Twenty-one beds in a section of the new hospital were also not in use. Admission is limited to white residents of Maryland.

Convalescent patients are being housed in the hospital which is equipped for acutely ill patients, because sufficient staff is not available for service required by acutely ill patients. Additional personnel would make it possible to transfer to the pavilions the patients who are able to wait on themselves, thereby providing beds in the hospital for the acutely ill patients on the waiting list.

The pavilions are wood structures which were built at a time when unheated open shelters were considered proper facilities for tuberculous patients. Their bed capacity was included with the total for the Sanatorium, but they are not considered satisfactory. They should be taken out of service as soon as beds in better structures can be established.

The State Sanatorium at Mt. Wilson, ten miles from Baltimore, has a capacity of 210 beds. Admission is limited to white residents of Maryland, except in the surgical section. Eleven surgical beds are reserved for nonwhite patients. The surgical section containing a total of 23 beds is closed, due to shortage of personnel.

The State Sanatorium at Salisbury has a capacity of 78 beds which are intended for the use of white resi-

dents of the Eastern Shore. A cottage containing space for 18 beds is out of use, reducing the number of beds in service to 60.

The Mt. Pleasant Hospital, located at Reisterstown, is a member agency of the Associated Jewish Charities. Its capacity is 50 beds. Admissions are limited to white patients.

Eudowood Sanatorium (Hospital for Consumptives of Maryland), located at Towson, has a capacity of 194 beds and accepts only white patients.

The summary of normal bed capacity and beds in use is as follows:

INSTITUTION	NORMAL BED CA- PACITY	BEDS IN SERVICE		
		Total	White	Nonwhite
State Sanatoria:				
Henryton.....	538	357	—	357
Sabillasville.....	523	442	442	—
Mt. Wilson.....	210	187	187	—
Salisbury.....	78	60	60	—
Mt. Pleasant Hospital.....	60	60	60	—
Eudowood Sanatorium	194	194	194	—
Baltimore City Hospitals	280*	280	140	140*
Total beds.....	1,883	1,580	1,083	497
*Less unacceptable beds at				
Baltimore City Hospitals ..	140	140	—	140
Total acceptable beds	1,743	1,440	1,083	357

A department containing 100 beds for white tuberculous mental patients is maintained at the Springfield State Hospital at Sykesville. At the Crownsville State Hospital, for nonwhite mental patients, a section containing 38 beds for tuberculous patients is in use. In a new building at Crownsville, original plans called for the reservation of 80 additional beds for tuberculous patients. This building will be put into service in the near future, but the 80 beds will not be used as originally planned because the need does not justify such action.

Tuberculosis beds in mental hospitals were not considered as a part of the total available in this category since their use is limited to patients from the mental hospitals and not available to the general public.

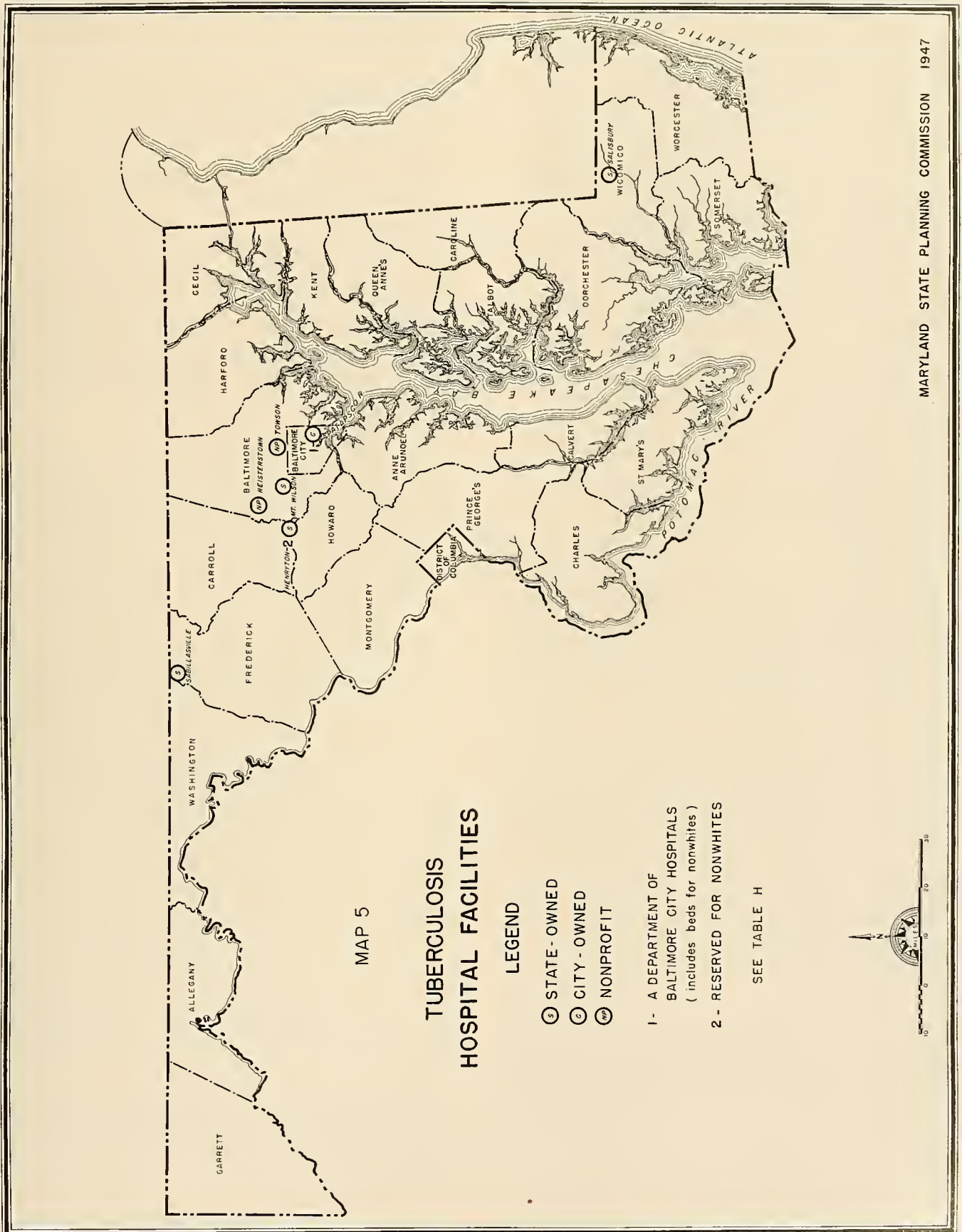
The Veterans' Administration has purchased a site in Baltimore on which it plans to construct a 300-bed tuberculosis hospital for veterans. While the admission of patients to this facility will not be limited to residents of Maryland, it can be expected that, because of its availability, it will be used by veterans who are residents of Maryland. It will relieve to some degree the demand on the existing hospitals.

Bed standards based on tuberculosis deaths

The United States Public Health Service set up in its regulations the generally accepted maximum standard of 2.5 tuberculosis beds per average annual death from tuberculosis over a five-year period. This is the minimum standard established by the American Trudeau Society, a national association of physicians specializing in tuberculosis, and by the Medical Section of the National Tuberculosis Association.

In a report on the Maryland Tuberculosis Sanatoria,

¹The classification as unacceptable refers to the structure in which the patients are housed and not to the service. With the acute need for beds in this category, this unit is indispensable until replacements are made available.



contained in the Capital Improvement Program for Maryland,¹ it is stated:

With the recognized minimum of one bed per death per year, it is apparent that the present capacity . . . totals a figure which would seem sufficient to meet the needs. Inasmuch, however, as the ratio between the negro and white cases is not in the same ratio as the facilities provided, more beds for colored patients are required. The white population is apparently cared for adequately.

It is apparent that the former State standard, upon which an impression of adequacy of existing facilities had been based, is only 40% of the present accepted standard.

Deaths in Maryland from tuberculosis for the period 1940 to 1944, inclusive, were as follows:

	Total	White	Nonwhite
1940.....	1,302	683	619
1941.....	1,256	635	621
1942.....	1,263	654	609
1943.....	1,250	667	583
1944.....	1,285	686	599
Total.....	6,356	3,325	3,031
Annual Average.....	1,271	665	606
Per Cent by Race.....		52.3%	47.7%

On the basis of 2.5 beds per annual death from tuberculosis, the need was computed as follows:

	Total	White	Nonwhite
Total beds needed.....	3,177	1,662	1,515
Existing acceptable beds.....	1,743	1,194	549
Additional beds needed.....	1,434	468	966

On the basis of normal bed capacities, considering only the beds in acceptable buildings, the standard of 2.5 beds per tuberculosis death is met only to the extent of 54.9%. Classified according to their availability by race, the standard is met up to 71.8% for white patients and 36.2% for nonwhite patients.

Tuberculosis deaths by place of occurrence

A compilation of deaths from respiratory tuberculosis during 1943 and 1944, published in *Hospitals*, August 1946, revealed that in Maryland the distribution was as follows: in general hospitals, 26.1%; tuberculosis hospitals, 37.1%; homes, 29.5%.

With the exception of the Baltimore City Hospitals, no general hospital in the State admits known tuberculosis patients. It must, therefore, be concluded that the deaths from tuberculosis reported by general hospitals were largely cases admitted undiagnosed or under circumstances justifying the setting aside of the hospital rules.

It is interesting to note the close relationship of the previous Maryland standard of one bed per tuberculosis death at 40% of the United States Public Health Service standard and the number of deaths occurring in tuberculosis hospitals at 37.1% of the total deaths from tuberculosis.

Case finding

The fact that only 37.1% of the deaths from tuber-

¹"Six-year Capital Improvement Program for Maryland," Maryland State Planning Commission and Department of Budget and Procurement, January, 1941.

culosis occurred in tuberculosis hospitals in 1943 and 1944 strongly indicates a failure in case finding, inadequacy of facilities, and a lack of public education to the benefits and safety of institutional isolation.

The organizational arrangement under which all counties and the City of Baltimore have functioning health departments provides the means by which cases can be found.

County health officers disclosed that a total of 486 clinics were held during the year reported. This is an average of 21 clinics per county per year. The average number of visits per clinic was 18, the total being 8,399. These figures do not include community surveys by mass chest X-ray.

The clinics conducted by the Department of Health of Baltimore City reported 11,980 visits during 1945.

Records of the Department of Health show that reports of cases found come from clinics, private physicians, and other institutions in approximately equal numbers.

Waiting lists

With the shortage of beds in this category, it was surprising to find that lists of patients waiting for admission were small. On the basis of the number of names on the waiting lists, the number of additional beds needed would not be justified.

It was learned from people actively engaged in this field that two factors account for the small waiting lists and both are direct results of inadequate facilities.

The general knowledge that there is a long wait until admission to a hospital is possible causes many people to despair of obtaining such service in a reasonable length of time. As a result, many do not file applications.

The sequel to this attitude is that those who do apply wait long periods for admission during which time their conditions deteriorate with the result that death frequently occurs shortly after admission. This gives weight to the very prevalent impression that people go to tuberculosis hospitals only to die. Efforts to educate the public to the viewpoint that tuberculosis is curable under proper treatment and care are thus defeated.

If adequate case-finding measures could be instituted and sufficient beds made available, cases found could be admitted promptly rather than in the terminal stage of the disease. Patients would file applications and waiting lists would turn over rapidly. At the same time, the public impression with regard to hospitalization for tuberculosis would change.

Unfortunately, the existing facilities are put to the least effective use when admissions are largely limited to patients who are beyond reasonable expectation of recovery. The only benefit of a limited program is the isolation of the infected person.

Admission procedures

Admission to the three State-owned tuberculosis hospitals for white patients is arranged through clinics

conducted throughout the State. Private physicians may certify patients for admission. Assignment of white patients to the institutions is done through the office of the General Superintendent at Sabillasville.

Nonwhite patients are certified for admission in the same manner. Their applications are directed to the Superintendent of the Henryton Branch.

None of the hospitals has medical-social service workers. When patients are discharged, they are reported to the local health district whose personnel follow up the cases.

State building plans

In reply to an inquiry with regard to building plans, the following reports were obtained:

Location	Plans
Henryton	Kitchen and quarters for employees
Sabillasville	1 building to house employees and service departments; 1 wing for 120 beds
Mt. Wilson	None
Salisbury	50 additional beds

During the 1947 session of the General Assembly, no applications for construction funds were filed by any of the State Tuberculosis Sanatoria. A request was made for maintenance funds in the amount of \$18,000 for renovation at the State Sanatorium at Sabillasville. These were the only funds appropriated for the Maryland Tuberculosis Sanatoria, aside from the regular operational budgets.

Administration of State Sanatoria

The four State-owned tuberculosis hospitals until recently have been under the direction of a Board of Managers of ten members. The Governor, Comptroller, and Treasurer were ex-officio members. The remaining seven nonsalaried members were appointed biennially for terms of six years.

The Superintendent of the State Sanatorium at Sabillasville functioned as general superintendent of the other three institutions, each of which was under the immediate direction of a medical superintendent.

Recently, with the retirement of the General Superintendent, the Board adopted a resolution requesting that the institutions be placed under the jurisdiction of the State Department of Health, and that the Board of Managers be discharged. The Legislature took the recommended action.

Area served

The use of all beds for tuberculous patients in the State are limited to residents of the State, with the exception of a few at Eudowood.

Nonwhite patients from all parts of the State must travel to Henryton for hospitalization. Nonwhite residents of Baltimore City are admitted to the tuberculosis section of the Baltimore City Hospitals, where 140 beds are reserved for them in a building which, because of its condition, should be taken out of service as soon as replacements can be constructed.

It was found that white residents from all parts of the State were admitted to the three State-owned hospi-

TABLE R: DISTANCE FROM POPULATION CENTERS TO NEAREST AVAILABLE STATE TUBERCULOSIS SANATORIUM

COUNTY	STARTING POINT	DISTANCE (MILES) ¹			
		Mt. Wilson ¹	Sabillasville ¹	Salisbury ¹	Henryton ²
Allegany	Cumberland		82		120
Anne Arundel	Annapolis	36			53
Baltimore	Towson	20			35
Baltimore City	Center	15	60		26
Calvert	Prince Frederick	70			81
Caroline	Denton			41	88 ³
Carroll	Westminster		40		17
Cecil	Elkton			92	83
Charles	La Plata	82			86
Dorchester	Cambridge			33	103 ³
Frederick	Frederick				27
Garrett	Oakland		139		177
Harford	Bel Air	36			53
Howard	Ellicott City	16			17
Kent	Chestertown			80	92 ³
Montgomery	Rockville	41			25
Prince George's	Upper Marlboro	47			60
Queen Anne's	Centerville			64	76 ³
St. Mary's	Leonardtown	105			109
Somerset	Princess Anne			13	149 ³
Talbot	Easton			48	88 ³
Washington	Hagerstown		15		53
Wicomico	Salisbury			0	136 ³
Worcester	Snow Hill			18	154 ³

¹For white patients.

²For nonwhite patients.

³Excluding bay-crossing distance.

tals in spite of the fact that the branch at Salisbury is primarily intended for white residents of the Eastern Shore.

A study was made of the distance between the hospitals and the centers of the counties and Baltimore City. The findings are shown on Table R.

Patients from St. Mary's County, for whom the hospital at Mt. Wilson is the nearest, must travel 105 miles between their homes and the institution. Those from Oakland in Garrett County, for whom the hospital at Sabillasville is nearest, must travel 139 miles.

Nonwhite residents are forced to travel even greater distances to the hospital at Henryton. From Cumberland, the distance is 120 miles. Residents of Worcester County on the Eastern Shore must travel 154 miles in addition to the bay crossing.

These distances indicate a very definite need for a better distribution of facilities. Such improved distribution will reduce expense of travel, add to the convenience of visitors, and as a result increase the number of patients who will accept institutional care when recommended. At the same time, it will probably reduce the number of patients leaving the institutions against advice.

Types of facilities and priorities

Under Priorities, Part IV, precedence is given construction of tuberculosis facilities planned as additions to general hospitals. One important illustration of the desirability of such procedure is the utilization of beds for nonwhite tuberculous patients.

There are 357 beds in service for nonwhite tuberculous patients in the entire State outside the Baltimore City Hospitals. In spite of this fact, the waiting list at Henryton contained only 45 names on April 9, 1947.

In contrast to this situation, the administration of

the Baltimore City Hospitals found it necessary to allocate beds for tuberculous patients between white and nonwhite patients. It was explained that otherwise all of the beds would be occupied constantly by nonwhite patients. It seems likely that because of convenience and possibly greater confidence attached to a general hospital, the applicants more readily accept hospitalization in a department of a general hospital located in an urban area than in an isolated institution limited only to the care of tuberculous patients.

Tuberculosis is now recognized as a preventable and curable disease. Under recently developed mass X-ray programs, cases are found in their incipiency and may be treated at home, or at hospitals for reasonably short periods. Surgical treatment has reduced the period of hospitalization. There is the possibility that the need for facilities in this category may be reduced to the point where the sections of hospitals constructed for this purpose may eventually be converted to other uses. This is an important factor in constructing tuberculosis facilities as additions to general hospitals.

General hospitals have operating rooms and personnel available for the surgical procedure now used in treating tuberculosis. Tuberculous patients are subject also to acute illness and accidents, which require general hospital care. Duplication of ancillary facilities can be avoided by a close relationship between the two types of institutions.

The disruption of the life of the patient and of his family when institutional care is required, on which is superimposed the fact that facilities are only available at an inconvenient distance, are deterrents to accepting hospitalization.

These factors were given consideration in determining that additions to general hospitals be awarded "A" priority and new installations at new locations "B" priority. It is expected that better geographic distribution of facilities will thus be established.

Apprehension is held by some people with respect to establishing tuberculosis facilities in general hospitals. They feel that the tuberculosis department will be treated as a stepchild. This feeling is based on the fact that in the past the tuberculous patient was avoided by the general hospital. Like the mental patient, when found within the hospital, the tuberculous patient was discharged promptly.

This attitude is attributable to the fact that proper facilities for such patients were not a part of the hospital. Personnel was not trained in this field. The doctors largely shared the viewpoint of the hospital administration, looking at the tuberculous patient as a case to be referred to the State Sanatorium. As a result, training and experience in the field of tuberculosis have been very limited.

The establishment of a department for tuberculosis in a general hospital and the inclusion of training and experience for nurses and internes and staff members, coupled with the newer more positive techniques, including surgery, would be insurance against a stepchild attitude toward the department in a general hospital.

Distribution of new tuberculosis hospital beds

Having concluded that a better distribution of

facilities for the care of tuberculous patients was needed, efforts were directed to devising a plan for the allocation of beds to locations which would bring about such better distribution.

It was concluded that the factors which were considered when consolidating the general hospital service areas into the regions, such as, convenience of travel, absence of natural barriers, and trading habits, would be of equal importance in locating new tuberculosis facilities and determining regions to be served by such facilities. The same regions and regional centers were therefore designated (Map 4).

Since deaths from tuberculosis were used as the base for determining the need for facilities, the distribution of new beds was made on the same basis.

A report of deaths from tuberculosis by county and by race was obtained from the Bureau of Vital Statistics of the State Department of Health. A tabulation of these data by counties, grouped by regions, is shown in Table S.

The existing acceptable beds are equivalent to 54.9% of the total number considered to be necessary. As stated previously, the determined need for white patients is met up to 71.8%; whereas, for nonwhite patients, only 36.2% of the need is fulfilled.

The priority schedule, discussed in Chapter 12, provides for construction of tuberculosis facilities. Over a period of time the schedule should equalize the existing facilities and needs, the only limiting factor being availability of funds.

TUBERCULOSIS HOSPITALS

MARYLAND TUBERCULOSIS SANATORIUM, SABILLASVILLE

The Maryland Tuberculosis Sanatorium at Sabillasville is situated in the northwestern corner of Frederick County, close to the Maryland-Pennsylvania state line. It was opened in 1908 and was the first State-owned sanatorium for the care of tuberculous patients.

It is 65 miles from Baltimore, 18 miles from Hagerstown, and 23 miles from Frederick.

Area served: Admission is limited to white patients who are residents of Maryland. White residents of all parts of the State are admitted to this institution. For the year ending June 30, 1945, 46.6% of the patients admitted were residents of Baltimore City.

Bed capacity: The institution has a normal capacity of 523 beds.

Utilization: During the period for which the report was submitted, 444 patients were discharged and 89 died, making a total of 533. This indicates a turnover of slightly more than one patient per bed per year. The 533 patients discharged or died received an average of 252 days of service. On the basis of normal bed capacity, the occupancy rate was 94.2% for the year reported.

Medical staff: The Medical Staff consists of the Superintendent and five full-time resident physicians, on a salary basis.

Personnel: The total personnel includes 158 full-time employees and two part-time employees, establishing a

TABLE S: BEDS NEEDED FOR TUBERCULOUS PATIENTS BY COUNTY, REGION, AND RACE, ACCORDING TO 1945 TUBERCULOSIS DEATHS¹

REGION	TOTAL		WHITE		NONWHITE	
	Deaths 1945	Beds Needed at 2.5 Per Death	Deaths 1945	Beds Needed at 2.5 Per Death	Deaths 1945	Beds Needed at 2.5 Per Death
<i>Cumberland</i>						
Garrett.....	3	7.5	3	7.5	0	0.0
Allegany.....	16	40.0	15	37.5	1	2.5
REGIONAL TOTALS.....	19	47.5	18	45.0	1	2.5
<i>Baltimore City</i>						
Washington.....	20	50.0	18	45.0	2	5.0
Frederick.....	18	45.0	14	35.0	4	10.0
Cecil.....	12	30.0	10	25.0	2	5.0
Calvert.....	8	20.0	3	7.5	5	12.5
St. Mary's.....	18	45.0	8	20.0	10	25.0
Anne Arundel.....	38	95.0	21	52.5	17	42.5
Baltimore.....	64	160.0	43	107.5	21	52.5
Howard.....	12	30.0	4	10.0	8	20.0
Harford.....	16	40.0	13	32.5	3	7.5
Carroll.....	13	32.5	8	20.0	5	12.5
Baltimore City.....	773	1,932.5	349	872.5	424	1,060.0
REGIONAL TOTALS.....	992	2,480.0	491	1,227.5	501	1,252.5
<i>District of Columbia</i>						
Montgomery.....	32	80.0	20	50.0	12	30.0
Prince George's.....	41	102.5	27	67.5	14	35.0
Charles.....	12	30.0	5	12.5	7	17.5
REGIONAL TOTALS.....	85	212.5	52	130.0	33	82.5
<i>Easton</i>						
Kent.....	6	15.0	1	2.5	5	12.5
Queen Anne's.....	12	30.0	5	12.5	7	17.5
Talbot.....	12	30.0	4	10.0	8	20.0
Caroline.....	12	30.0	8	20.0	4	10.0
Dorchester.....	19	47.5	8	20.0	11	27.5
REGIONAL TOTALS.....	61	152.5	26	65.0	35	87.5
<i>Salisbury</i>						
Wicomico.....	23	57.5	13	32.5	10	25.0
Somerset.....	14	35.0	6	15.0	8	20.0
Worcester.....	24	60.0	11	27.5	13	32.5
REGIONAL TOTALS.....	61	152.5	30	75.0	31	77.5
STATE TOTALS.....	1,218	3,045.0	617	1,542.5	601	1,502.5

¹Maryland State Department of Health, Bureau of Vital Statistics.

ratio of 0.3 employee per bed. One hundred and eleven employees are quartered in the institution.

Educational activities: A school for practical nurses is in operation. The course covers two years' training and qualifies the student for a State license in practical nursing limited to the care of tubercular patients. At the time of the survey, there were only two students in training. The school is set up for 20 students. In 1941, 20 students were graduated. In 1944 only one student completed the two-year course.

MARYLAND TUBERCULOSIS SANATORIUM, MT. WILSON

The Mt. Wilson Branch of the Maryland Tuberculosis Sanatorium was opened in 1925. It is owned and operated by the State of Maryland and is located in Baltimore County near Pikesville, ten miles from Baltimore City.

Area served: Admissions are limited to white residents of the State of Maryland, except in the surgical section where eleven beds are reserved for nonwhite tubercular patients needing surgical care. Records show that patients are admitted from all parts of the State. Residents of Baltimore City make up 51.5% of all admissions. Residents of Baltimore County account for 10.8% of all admissions.

Bed capacity: The normal bed capacity of this institution is 210 beds.

Utilization: Patients in other State tuberculosis hospitals who are in need of surgical care are supposed to be transferred to this institution. Due to lack of personnel, the surgical department is closed.

During the year ending June 30, 1945, 256 patients were discharged and 33 died, making a total of 289. This is a turnover of 1.4 patients per bed per year. On the basis of normal bed capacity, the occupancy rate for the year was 91.1%. The average stay of patients discharged or died was 242 days.

Medical staff: The Medical Staff consists of the Superintendent and two full-time salaried resident physicians. Three thoracic surgeons make up the Visiting Staff. They are on a salary basis.

Personnel: The personnel consists of 104 full-time and seven part-time employees. Considering the part-time employees on a 50% basis, this is a ratio of 0.5 employee per bed.

Educational activities: There is no educational program.

MARYLAND TUBERCULOSIS SANATORIUM AT HENRYTON

The Maryland Tuberculosis Sanatorium at Henryton is owned and operated by the State of Maryland. It was opened in 1923. It is located in Carroll County, approximately 26 miles from Baltimore City.

Area served: Admission is limited to nonwhite residents from the entire State.

Bed capacity: The institution has a normal capacity of 538 beds.

Utilization: For the year ending June 30, 1945, 248 patients were discharged and 189 died, making a total of 437. On the basis of the normal bed capacity, the occupancy rate was 62.5% for the year reported. The average length of stay of patients discharged or died was 319 days.

Medical staff: The Medical Staff consists of the Superintendent and two full-time resident physicians along with three part-time physicians and a dentist, all of whom are on a salary basis.

Personnel: The personnel, as of the date of the survey, was 146 full-time and 14 part-time employees. Considering the part-time employees as being on duty 50% of the time, this establishes a ratio of 0.3 employee per bed. One hundred and twenty-six of the personnel are furnished quarters by the institution.

Educational activities: A school for the training of practical nurses in the field of tuberculosis is in operation. There were seven students in training at the time of the survey. Facilities are available for the training of a class of nine.

MARYLAND TUBERCULOSIS SANATORIUM, SALISBURY

Maryland Tuberculosis Sanatorium, located at Salisbury in Wicomico County, is owned and operated by the State of Maryland. It was opened in 1912.

Area served: Admission is limited to white residents of Maryland, primarily for residents of the nine counties making up the Eastern Shore. For the fiscal year 1944, 69.3% of the patients were from Wicomico, Worcester, Somerset, and Dorchester counties.

Bed capacity: The institution's normal capacity is 78 beds.

Utilization: During the fiscal year 1944, 54 patients were discharged and 21 died, making a total of 75. This represents a turnover of approximately one person per bed per year. Based on the normal bed capacity, the rate of occupancy was 65.5% for the year reported.

Medical staff: The Superintendent is the only physician employed at this institution. He is on a salary basis.

Personnel: There are 27 full-time employees, making a ratio of 0.35 employee per bed.

Educational activities: There is no educational program at the institution.

EUDOWOOD SANATORIUM

HOSPITAL FOR THE CONSUMPTIVES OF MARYLAND

Eudowood Sanatorium, located at Towson in Baltimore County, was opened in 1896. It is a nonprofit corporation, managed by a Board of Directors. The Board consists of 18 members, six of whom are appointed by the Governor and 12 are self-perpetuating. A Women's Board, with 60 members, engages in projects for the purpose of raising funds for supplying equipment to the institution.

The institution is assisted also by the Baltimore Tuberculosis Aid Society, American Legion Auxiliary, Rotary Club, Kiwanis Club, and others.

Area served: Admission is largely limited to residents of Maryland except in very unusual circumstances. Admissions are limited to white patients. A small department made up of private rooms is open for the admission of paying patients without restrictions as to residence. Patients for the year reported were largely residents of Maryland, 76.1% being from Baltimore City and Baltimore County and 21.5% from the other counties of Maryland.

Bed capacity: The normal bed capacity is 194, 48 of which are for children.

Utilization: During the year reported, 143 patients were discharged and 33 died, making a total of 176. The average length of stay of patients discharged and died was 132 days. The occupancy rate was 80.3%.

Medical staff: The Medical Staff is made up of the Superintendent and three part-time physicians, all of whom are on a salary basis. Patients are permitted to employ private physicians.

Personnel: Eighty-nine full-time and 49 part-time employees make up the personnel. Considering the part-time employees as being employed 50% of the time, this is a ratio of 0.6 employee per bed.

Educational activities: The institution does not engage in any educational program.

MT. PLEASANT HOSPITAL

The Mt. Pleasant Hospital, located at Reisterstown, is a member agency of the Associated Jewish Charities. It was founded in 1908 as a nonprofit association. It is managed by a Board of Directors, consisting of 15 members whose terms of office run for two years. The Board is self-perpetuating.

Area served: Admissions are limited to white residents of the State of Maryland. Most patients are residents of Baltimore City.

Bed capacity: It has a capacity of 60 beds.

Utilization: The rate of occupancy was 86.5% for the year reported. The average length of stay was 107 days.

Medical staff: The Medical Staff is not organized. The Chief of Staff is appointed by the Board of Directors. He selects his own associates. Physicians other than the Resident Staff may treat private patients. The Consulting Staff includes specialists in genito-urology, roentgenology, dermatology, laryngology, and gastroenterology.

Personnel: The personnel consists of 22 employees, establishing a ratio of 0.4 employee per bed.

Educational activities: There is no educational program in force.

Building plans: The Associated Jewish Charities, of which this institution is a member agency, is planning a large medical center to be located in the suburbs of Baltimore. This medical center will include facilities for the care of tuberculous patients. It is planned that at such time as the projected program materializes, the Mt. Pleasant Hospital will be converted to a convalescent home.

Conclusions

There is a serious deficiency of beds for the care of tuberculous patients, especially in facilities for non-white patients.

The isolated locations of the existing hospitals have the disadvantages of being remote from the labor and supply sources and inconvenient for patients and visitors. New facilities should be distributed so that convenient access would be possible from all parts of the State.

Tuberculosis institutions with a capacity of less than 200 beds ideally should be built close to or as parts of general hospitals. Those with capacities of more than 200 beds may well be built as separate units. In either situation, they should include or have immediate access to general hospital facilities, both for the surgical treatment of the tuberculosis conditions and for the treatment of other conditions arising which require general hospital care.

While surgery in the treatment of tuberculosis is not usually of an emergency nature, it is an important phase of the program and facilities and services must be readily available.

Outpatient clinics are a necessary part of the program and should be a required part of an institution which admits tuberculous patients.

The small lists of patients waiting for admission cannot be accepted as prima-facie evidence that there is no need for additional tuberculosis beds. The facts that existing facilities amount to only 54.9% of the standard, that important segments of those beds are not in use, that only 37.1% of the deaths in the State occur in tuberculosis hospitals, and that there are small waiting lists indicate:

1. Need for more active and effective case-finding methods.
2. Need for public education.
3. Need for facilities sufficient to give assurance that the wait on the list will be short.

The percentage of deaths from tuberculosis which occur outside the tuberculosis hospitals, 62.9%, indicates a high potential for the spread of the disease.

The transfer of the tuberculosis hospitals to the State

Department of Health should revitalize the program by bringing together under one department:

1. Case findings.
2. Medical care at the hospitals.
3. Follow-up care and rehabilitation by close alignment between the institutions and the public health nurses and medical-social workers.
4. Health education.

Equipment and renovation are need in all State tuberculosis hospitals.

A program for the utilization of existing beds now out of service and for the construction of additional facilities should be coordinated with the case-finding program. An intensified case-finding program would be largely wasted effort if facilities are not made available for the care of found cases.

Recommendations

It is recommended that steps be taken immediately to do whatever is necessary to put into service existing beds which are not now in use. This means construction of quarters and higher salaries for employees.

A program of renovation and modernization should be instituted where the cost of such procedure is not outweighed by advantages of total replacement.

Funds should be appropriated for the construction of tuberculosis facilities, especially for nonwhite patients.

Construction should be at locations close to communities from which personnel can be secured.

Where tuberculosis departments are set up as parts of general hospitals, the State should assume the financial responsibility for the operation of those departments.

Since a special committee of the State Planning Commission is now intensively surveying the tuberculosis program in Maryland, the needed facilities and suggested distribution are considered tentative. It is expected that the report of the special committee will have considered the material contained in this report and that their findings and recommendations will be the basis for some significant revision in the allocations of beds as developed on Table S.

Chapter 8. FACILITIES FOR CHRONIC OR LONG-TERM PATIENTS

IN true conformity with the laws of compensation, medical science is creating a problem by solving one. Man's success in obtaining longevity creates the problem of caring for the chronically ill, most of whom are in the higher age groups, and of caring for those undergoing a prolonged convalescence. In the last 60 years, man's life expectancy has been increased from 34 years to 64.4 years.¹

This lengthening of the span of life has increased the number of people in the higher age brackets (Table T)

TABLE T: PER CENT DISTRIBUTION OF POPULATION OF MARYLAND BY AGE, 1900-1940*

AGE GROUPS	PER CENT DISTRIBUTION				
	1940	1930	1920	1910	1900
Under 15.....	23.8	28.2	29.7	31.0	33.1
15-44.....	49.7	47.8	47.9	48.5	47.9
45-64.....	19.7	18.1	17.3	15.8	14.4
65 and over.....	6.8	5.7	5.0	4.7	4.2
Not reported.....	—	0.2	0.1	0.1	0.3
TOTAL.....	100.0	100.0	100.0	100.0	100.0

*United States Bureau of the Census, 16th Census of the United States, 1940.

and, hence, the number having long-term illnesses. The full impact of this trend has not yet been felt.

Science has accomplished this by devising improved means of piloting individuals through birth, childhood diseases, adolescence, reproduction, and some of the degenerative diseases of middle and advanced age. Preventive programs have reduced to a minimum the incidence and, hence, the hazard of diseases, such as malaria, typhoid fever, and small pox. With modern medicine and surgery and techniques for the control of living habits and body functions, many diseases which formerly were considered incurable or fatal, or left to the whims of nature, are now curable or at least not fatal.

In an increasing number of illnesses, such as appendicitis and pneumonia, surgery and medicine usually can provide a prompt and definite cure. However, some conditions, such as diseases of the heart and arteries or kidneys, cancer, diabetes, asthma, and arthritis, while controlled to the point where they are not immediately fatal, frequently are not curable. The result often is a long period of convalescence or invalidism.

The chronic or long-term diseases are those which are incurable or of long duration, limiting to varying degrees the activities of the patient or causing total disability. As a result of the successes in medical science, in which the law of the survival of the fittest has been modified, society now faces the problem of providing for those whom science has preserved without curing. In the same category and presenting many of the same

problems are those who have survived the diseases and dangers of an active life and have come to the later years of that life with the disabilities of old age.

Many aged persons enjoy good health and the rewards of a hard-earned rest by living off their pensions or savings. But a visit to homes for the care of the aged and to other types of nursing and convalescent homes, or a talk with the representatives of the Department of Welfare who assist in finding shelter for their chronically ill and aged clients, supplies vivid testimony to the fact that man's success in one endeavor is offset to a degree by his apparent failure in another. Some progress has been made toward solving the problem of the care of the aged and chronics, but even a casual inspection of the medical institutions of Maryland emphasizes the inadequacy of facilities for their care.

Today's overwhelming demand for beds and services in all categories of medical institutions raises the question: Where shall provisions be made for the chronically ill, the incurables, those having conditions requiring long periods of convalescence and rehabilitation, individuals with congenital disabling conditions, and those who are disabled by advanced age, all of whom may be grouped as patients with long-term illnesses?

It is generally accepted that county homes or almshouses are not proper places for these patients.

Institutional care for patients with a long-term illness only in recent years has been recognized as a distinct medical field. Thinking in this respect has not yet produced a generally accepted solution.

General hospitals today cannot admit the aged or those who have long-term illnesses. This is not a matter of option. There are not enough beds available in general hospitals to meet the demands of the short-term acutely ill cases applying. The inadequacy of general hospital facilities is documented earlier in this report.

It is true that now techniques and drugs have expedited diagnosis and shortened the period of hospital stay, but not nearly enough to offset the added loads otherwise imposed.

Existing facilities

There are 114 institutions in the State classified as chronic disease hospitals, nursing homes, and homes for the aged. Excluding institutions offering only domiciliary care, these were found to have in use 2,391 beds. Most of the nursing homes included were converted dwellings.

Those offering insufficient nursing service or located in unsuitable structures were later eliminated. The final list of institutions considered acceptable numbered only 35, with a total of 1,713 beds.

Nursing homes

The pressure to have convalescent patients discharged from general hospitals and dearth of facilities preventing the admission of patients with diagnoses indicating

¹Bulletin of the Metropolitan Life Insurance Company, October 1945.

a probable long-term illness have resulted in the mushrooming of nursing homes.

Most nursing homes are proprietary and operated for profit. Some are beautiful structures with an air of luxurious cleanliness and refinement. From this degree of elegance, they range down the scale to a point where several "boarders" were found occupying cots in small buildings within the back yard chicken enclosure, with the chickens occupying the surrounding shanties. These conditions are a disgraceful indictment of the State of Maryland.

Nursing homes can be classified in three groups. In the first group are fine structures, well equipped and with adequate service maintained. The second group is comprised of those which, with some remodeling and additional equipment and personnel, can eventually attain satisfactory standards of service. In the third group are those which are so limited as to structure and other features that there is no prospect of their ever attaining satisfactory minimum standards. These should be taken out of service as rapidly as other accommodations can be found. Under the licensing program, some have been eliminated but many are still in operation.

The State Department of Health refuses to dignify institutions in this group by issuing even a temporary license to them. The Department is in the paradoxical position of having to permit such institutions to operate and, in so doing, to condone their services and facilities, while it is quite apparent that they are not fit places for the care of patients. To institutions in the second group, licenses are being issued on a temporary basis with stated conditions which must be met before the expiration of the limited period for which the license is termed.

Until such time as suitable institutions are available to provide adequately for all those needing this type of institutional care, the Department of Health will not be able to close all of the unfit places. As the situation stands, some operators of private homes ask in defiance or in desperation, "Where will these patients go if we close and turn them out?" Being unable to suggest an alternative, the State reluctantly allows them to continue with the hope that adequate facilities will eventually come into being.

The derogatory comments about nursing homes are statements of facts, as they were found to exist and are not intended to depreciate their importance. The nursing homes, both proprietary and nonprofit, can play a most important role in supplying service in the field of chronic disease and convalescent care. Suitable institutions from the standpoint of structure, service, and facilities should be encouraged as a supplement to such service in the home, in the larger chronic disease hospitals, and in the special departments of general hospitals. Their place in a complete integrated plan for the care of long-term illnesses should be fully assessed.

The vastness of the construction program required to bring the number of chronic disease hospital beds into some relationship with the number needed presents a financial problem which will require some time to be

met. The opening of suitable nursing homes presents a more immediate partial solution to the problem.

Suitable nursing homes are those which are located in proper environment and which fully comply with the standards set up for licensing, with adequate medical and nursing service, physical and occupational therapy, and space for recreation.

STATE PROGRAM

Official cognizance was taken of the need for institutions for the care of chronically ill when the Legislature enacted laws in 1943 and 1945, committing the State to the construction of three chronic disease hospitals (Appendices G and H).

These enactments followed the survey of the almshouses of Maryland made by the State Department of Welfare for the Legislative Council in 1940,¹ and the report prepared by the Almshouse Commission.²

The three hospitals were intended at that time to have capacities as follows: Salisbury, 300; near Baltimore, 500; near Hagerstown, 500. Responsibility of these institutions was placed with the State Department of Health.

The original appropriation for the three institutions was \$2,500,000. When bids were taken for the construction of the first building to be erected at Salisbury, it was found that this one institution would entail an expenditure of \$1,798,860 for construction. The construction of the other two hospitals was held up pending the appropriation of additional funds.

The Department of Health submitted to the 1947 Legislature an application for appropriations for the construction of the two additional hospitals to be located at Hagerstown and Baltimore, but no construction funds were made available. A sum of \$45,000 was appropriated for engineering and architectural services on the Hagerstown project.

In the application for appropriations, the estimated construction costs of the 500-bed Hagerstown hospital was set at \$4,670,000. This is based on a construction cost of \$9,340 per bed. In addition, it was estimated that the cost of construction of housing facilities for personnel would amount to \$290,000. The operating cost was estimated at \$1,500,000 for a two-year period, or \$1,500 per bed per year.

The estimated cost of the hospital to be located in Baltimore was \$5,440,000 for 600 beds, or \$9,007 per bed. The estimated operating cost was set at \$1,800,000 for a two-year period, or \$1,500 per bed per year.

The United States Army Hospital at Camp Ritchie, in Frederick County, has been turned over to the State for use as a temporary chronic disease hospital until the permanent hospital can be constructed in Hagerstown. Problems of personnel and equipment delayed the opening of the Camp Ritchie Hospital until September 8, 1947.

¹*Report on the Almshouses in Maryland*, Maryland Legislative Council, April 1940.

²*Report of the Almshouse Commission*, November 22, 1940.

Long-term patients and general hospitals

The shortage of general hospital beds for acutely ill patients makes it impossible to assign any of the existing general hospital beds to the use of patients with long-term illnesses. General hospitals are geared to render intensive service for short-stay patients, which requires a high ratio of personnel, and results in a high cost per patient day.

However, a hospital for the care of chronic disease patients must maintain facilities and personnel sufficient to meet all medical needs of its patients, which include acute illnesses and injuries resulting from accidents. If it is to fulfill its purpose it must have a planned rehabilitation program with sufficient facilities and trained personnel to insure maximum results. The establishment of such services will result in a proportionately high cost per patient day.

This apparent paradox can be resolved and the duplication of ancillary services, such as X-ray, operating rooms, laboratories, physical and occupational therapy, and administration, can be avoided if the chronic disease hospitals are established as a part of or convenient to existing general hospitals. Under such an arrangement the elimination of the facilities which are maintained already by the general hospital will result in a lower average cost per patient day in the chronic disease department.

The chronic disease department will be available for use by patients having a long convalescence. Such patients can be transferred promptly from the general hospital, thus making general hospital beds, with their intensive services, available more quickly for other patients with acute illnesses.

The care of convalescent patients in the chronic disease hospital has many advantages over present practice by which they are frequently discharged to their homes where inadequate help and facilities are available. This practice often results in a longer convalescence, incomplete recovery, and at times, a relapse necessitating a return to the general hospital.

Chronic disease hospitals should therefore be constructed as additions or closely related to general hospitals. This plan has the reciprocal benefit of better care for the patients because of availability of facilities and medical personnel, while the physicians and nurses gain experience with this type of patient and have an opportunity for research in the field.

Such a plan obviates the administrative costs of a separate institution. A procedure could be set up by which payment for services rendered patients who would otherwise qualify for admission to State-owned chronic disease hospitals could be made to the general hospital, based on the cost of services calculated separately for the chronic disease department.

Hospitalization in a general hospital would be free of the stigma of charity usually attached to State institutions. Patients able to pay for their care could be admitted. State chronic disease hospitals are primarily intended to care for those unable to pay for services.

As additions to general hospitals, the facilities will have a better distribution across the State, making them

more accessible and more readily acceptable by patients and their relatives. Located in communities with general hospitals, problems of securing personnel will be reduced.

Convalescent care

The term *convalescent care* is usually applied to the period between the acute exacerbation and recovery, whereas the term *chronic* has, in the past, not usually carried the connotation of recovery. With newer techniques, some chronic conditions which were formerly considered permanent and incurable are now considered curable or controllable, with prospects of the patient's being returned to society on a rehabilitated basis, adjusted to the residual disability or limitations imposed by the disease. Many chronic patients are, therefore, looked upon today as being in the process of a long convalescence.

Institutions for the care of convalescents are an apparent need at present. Such institutions or departments of general hospitals need not be geared to the intensive regime maintained where patients in the acute stages of illness are served. They would serve that group of patients whose home environments do not lend themselves to the required conditions.

Patients whose period of convalescence is expected to be long can be provided for in nursing homes for convalescents. However, because long periods of convalescence frequently deplete financial resources and most nursing homes are operated on a proprietary basis with a profit motive, most patients with a prognosis of slow recovery, of necessity, must look to public-owned institutions for care. The need for chronic disease hospitals for the care of chronically ill patients is, therefore, amplified by the need for facilities for convalescent patients.

When institutions are constructed, chronic disease hospitals should therefore include departments for chronics, incurables, and convalescents.

Welfare patients

In the absence of chronic disease hospitals, the Department of Public Welfare has made allotments to clients and assisted them in making arrangements for care in nursing homes. The limited sums allowed are reflected in the services rendered.

In the course of the survey, it was found that nursing homes which admitted any appreciable per cent of "welfare cases," that is, persons dependent upon allotments from the Department of Welfare, were generally of very low standard. The charges to Welfare Department clients were usually limited to the amounts of their allotments and were consistently low. The service was of proportionately low quality.

Taking into consideration the economic value of rehabilitated persons as compared with the liability of an inmate of an institution, it would be economically sound to allot, for these patients, sufficient public funds to command adequate medical, nursing, and ancillary services to insure as high a per cent as possible of rehabilitation. Such arrangement with convalescent nursing homes would have value as a con-

tinuing program for the better distribution of this type of service. It would be a semblance of a program in this field until institutions can be built out of public money.

The Welfare Department, in making allotments to clients who use these funds for the purchase of care in homes which are below the licensing standards, is indirectly subsidizing such places and defeating the purposes of the licensing program.

It would seem logical to have the Department of Health, under which the licensing program is conducted, reach an understanding with the Welfare Department whereby it would recommend and encourage its clients needing bedside or medical care to purchase service only in licensed institutions.

DISTRIBUTION OF FACILITIES

Facilities for chronic disease patients should be so distributed as to be of easy access from all parts of the State. The general hospitals regions (Map 4) were, therefore, used as a basis for the geographic allocation of beds. The ratio of 2.0 beds per 1,000 population was used to determine the number of beds allocated to each region. The resultant figure was adjusted by the number of acceptable beds in each region, with the following result:

Region	Population 1943	Bed Quota	Acceptable Bed Capacity	Additional Beds Needed
Cumberland.....	99,836	200	9	191
Baltimore City	1,490,351	2,981	1,581	1,400
District of Columbia	241,564	553	116	437
Easton.....	81,766	163	—	—
Salisbury.....	69,430	139	7	295
Totals.....	1,982,947 ¹	4,036	1,713	2,323

Allegany County was authorized by the 1947 General Assembly to issue bonds in the amount of \$250,000, for the erection of an Infirmary and Nursing Home (Chapter 769, Laws of Maryland 1947). This will expedite the program for the installation of the 191 chronic disease beds assigned to that area.

The Allegany County project will reduce the demand for such facilities in the Hagerstown area. In the light of this development, the chronic disease hospital planned for Hagerstown should be reduced proportionately. Frederick and Washington counties, which will be served by a hospital located in Hagerstown, have a total population of 121,664. They will require 243 beds, on the basis of 2.0 beds per 1,000 population. The chronic disease hospital for this area should, therefore, be designed to have a capacity of 250 beds. This leaves 1,150 beds to be located elsewhere in the Baltimore City Region. This remainder should be constructed in and around Baltimore City.

¹The United States Bureau of the Census reported the estimated population, as of July 1, 1945, as 35,024 greater than the estimate of November 1, 1943. Since the increase was not reported by counties, distribution was made on the basis of the 1943 figure, and the 70 additional beds by which the State quota was increased were added to the District of Columbia Region.

The District of Columbia Region is allocated 437 beds.

In order to have better accessibility, it was felt that a chronic disease hospital should be built in Easton. On the basis of the population of the area, it should have a capacity of 163 beds.

Another installation should be made at Salisbury. This should contain 139 beds. Since a contract already has been let by the State for a 300-bed unit to be constructed in Salisbury, the beds needed for the two regions are considered to be included in this institution.

It is understood that chronic disease hospitals will admit members of all races. It is expected that beds will be allocated as needs arise.

Conclusions

There is an acute need for facilities for chronic, incurable, and convalescent patients. Based on the accepted standard of 2.0 beds per 1,000 population, there is a need for 4,036 beds in this category. The existing acceptable beds total 1,713, leaving a shortage of 2,323.

With the steady increase in the span of life, the potential number of patients in this category can be expected to increase. Unless active steps are taken to put in operation known methods of rehabilitating as many as possible of such patients, the number requiring institutional care will increase cumulatively.

The potential gain which could result from the rehabilitation of such patients justifies an investment in facilities for this purpose, without taking into consideration the return in human happiness.

Availability of beds for this purpose would result in a saving to paying patients against the higher cost of care in a general hospital.

More efficient use could be made of general hospital beds if facilities were conveniently available for convalescent and chronic patients.

Assurance of complete services would be greater if chronic disease hospitals were closely integrated with general hospitals. This arrangement would bring into direct contact with the field the specialists on the staffs of the general hospitals. At the same time, their services would be made available to the chronic disease patient. Furthermore, opportunities would be created for training and research in this field.

Allotments of welfare funds are too small to allow the recipients to purchase satisfactory services.

Recommendations

It is recommended that:

1. Efforts be made to have the State program for the construction of chronic disease hospitals executed at the earliest possible time.
2. These hospitals be constructed as additions to or as close as possible to general hospitals.
3. Additional facilities for this purpose be constructed at the regional centers as designated under the general hospital program.

4. The plan projected at present for the construction of chronic disease hospitals be reconsidered from the standpoint of better geographic distribution.

5. Nursing homes be encouraged if they establish high standards and render therapeutic and rehabilitative services.

6. Public health nursing service supplemented by medical and housekeeping service be made available in the homes of patients in this category.

7. Allotments of funds to welfare clients requiring bed care be supplemented by an amount sufficient to allow the purchase of care in institutions maintaining sufficient services and facilities to give a reasonable assurance of recovery and rehabilitation.

8. Where chronic disease hospitals are an integrated part of the general hospital, the State pay for services rendered patients who qualify for assistance, at a rate based on costs calculated separately for the chronic disease department.

Chapter 9. MENTAL HOSPITALS

A MENTAL hygiene program includes services and facilities for the prevention and treatment of conditions, existing and potential, which are inimical to mental health.

The scope of such program encompasses:

1. Programs for the prevention of mental illness.
2. Case finding.
3. Facilities for treatment of ambulatory persons mentally ill.
4. Institutional facilities.
5. Program for follow-up care of patients discharged or paroled from institutions.
6. Training of physicians, nurses, and other personnel.
7. Research.

The mental hospital is a unit in this program; however, its maximum effectiveness can be obtained only if the other phases of the program are in effect.

The mental hospital of today is the successor to the insane asylum of yesterday. Both titles are appropriate.

In the hospital one expects constructive therapy, resulting in improvement or cure; whereas, in the asylum, as the title denotes, little more than custodial care is available.

From the austere fortress-type of institution with cupolas housing armed guards, the mental hospital has evolved with divisions for the segregation of patients by type of illness, containing departments of physical and occupational therapy and other services.

With this transition, progress has been made in converting public attitude toward patients from one of resignation to one of confidence and expectation of recovery. The changes have not been in attitude alone. The development of treatments, such as shock therapy, has placed some types of mental illness in the category of curable diseases. Consequently, the treatment of some types of mental illness has been placed within the scope of the general hospital. Psychiatric service in general hospitals for inpatients and outpatients has therefore become an essential part of a mental health program.

The psychiatric department of the general hospital, located within the community, serves as the diagnostic, therapeutic, research, and personnel training center. It serves the patients who, after short, intensive treatment, can recover sufficiently to return to society. Such psychiatric departments, supplemented by outpatient clinics, broaden the scope of the hospital's program and are complementary to the mental hospital in supplying diagnostic and postinstitutional care.

Patients admitted to such psychiatric sections of general hospitals have available the services of the specialists in other fields on the staff of the hospitals. Through this arrangement, opportunities for research are established.

The value of personnel training and of experience

gained by nurses, resident physicians, and auxiliary workers is inestimable.

Psychiatric departments of general hospitals are free of the stigma which, while unjustified, still prevails with regard to State institutions limited to the care of mental disease. The former are not located in isolated places as is the case of most existing mental hospitals. Located near urban communities, they are near sources of labor supply.

The purpose of this study is to determine the differential between the currently existing acceptable facilities and those needed to establish a state of adequacy, and to project a long-range plan for the construction of the additional facilities needed.

The existing facilities were determined through the survey (Table J and Map 6).

The determination of adequacy in mental health facilities is not as simple as implied in the Hospital Survey and Construction Act, which states that the total number of beds for mental patients shall not exceed 5.0 per 1,000 population.¹

Mentally ill persons are heir to all the illnesses to which normal people are subject, so that the incidence of other ailments adds to the complexity of the problem. Arrangements must be made for the segregation at least by age and sex within each of the divisions. There are classifications of mental diseases which present different problems and, preferably, are cared for separately. These include the mentally ill, the delinquent, the feeble-minded, the epileptic, and the criminally insane. Not segregated are some less defined groups, such as senile patients, the adult feeble-minded, and others. The acuteness of the problem presented by these groups is growing. Often there are no clear lines of demarcation among these types of patients.

It is necessary that policies be established to govern the manner in which existing institutions are expanded and utilized to meet these growing needs. The advisability of new institutions for special types of patients also will be affected by such policies. Until this is done, no orderly approach can be made to a plan of expansion which will result in the meeting of all recognized needs.

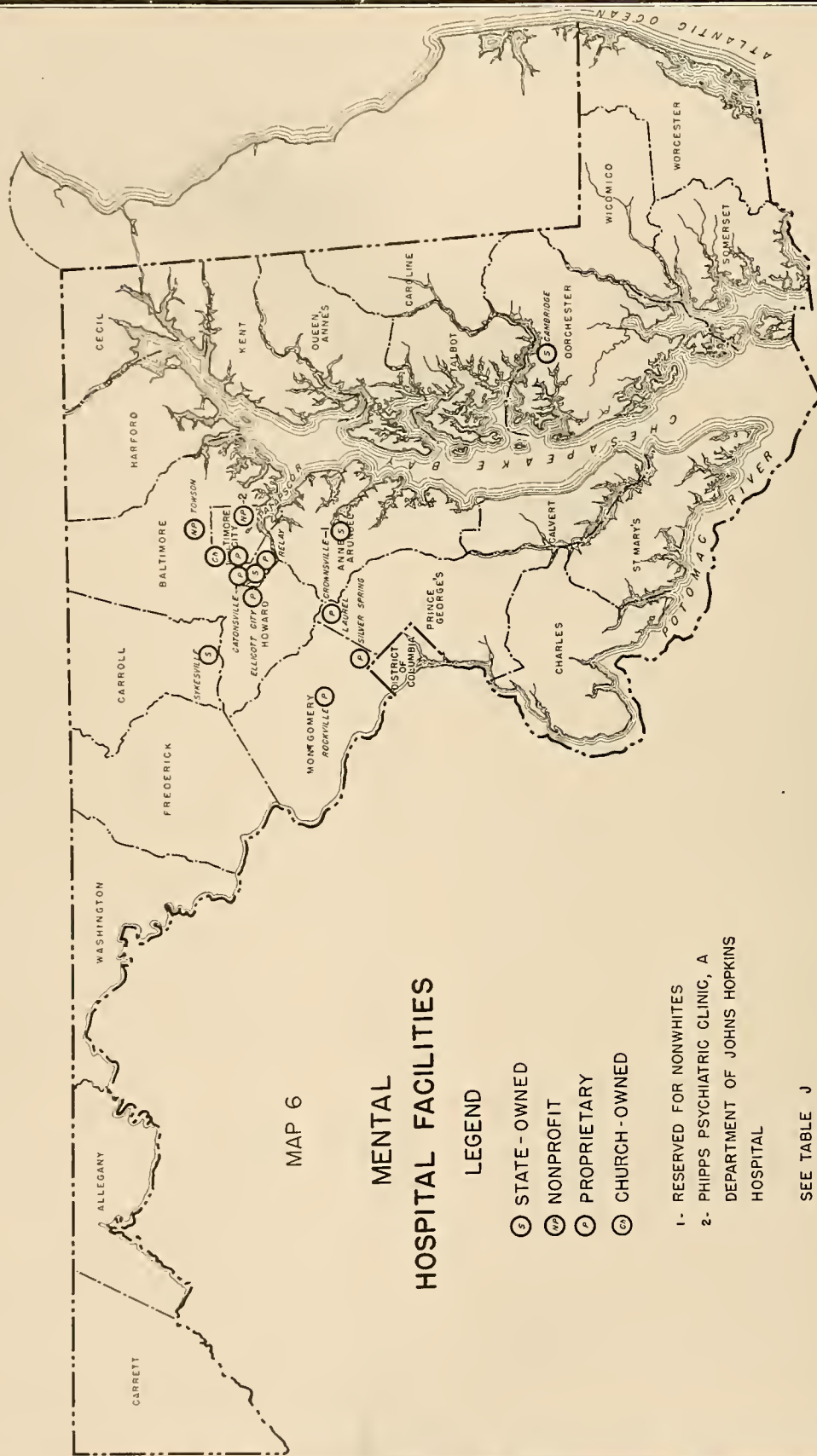
The ratio of 5.0 beds per 1,000 population is considered as the need for mentally ill patients exclusive of feeble-minded and epileptics.

Mental hygiene in Maryland is under the supervision of the State Board of Mental Hygiene. Its duties and operations are described as follows:²

The Board of Mental Hygiene was established in 1922 as the successor to the State Lunacy Commission which was established by Chapter 487 of the Laws of 1886. The primary duty of the Board is to supervise the care given mental patients in public and private hospitals in

¹Appendix A, Public Law 725, Section 622(b).

²*The Maryland State Budget for the Fiscal Years Ending June 30, 1946 and June 30, 1947*, issued January 1945, p. 185.



Maryland. The Board of Mental Hygiene consists of six members and the Commissioner of Mental Hygiene who is a member of the Board.¹

A central record is kept of all patients who are admitted to any institution for mental patients, either public or private, in Maryland and a similar record is made of all discharges, so that information is readily available as to all institutional mental patients in the State.

The office maintains a service by which non-resident patients admitted on an emergency basis to public mental hospitals in Maryland are returned to their State of residence and by which residents of Maryland are likewise returned from other States.

The office employs an Inspector of Nursing who visits all the public and private hospitals for mental patients, inspects the nursing conditions, investigates the general operation of the institutions, and reports to the Commissioner.

The office in cooperation with the County Commissioners of the various counties and the County Boards of Welfare arranges for an investigation of the ability of relatives to pay for the care of patients in the State hospitals and sees to it that this money is collected and turned over to the State.

In cooperation with the Superintendents of the State hospitals, because of the overcrowding at Spring Grove and Springfield, this office arranges for the assignment of beds at these two institutions for all patients applying for admission. This service requires the handling of about 1,700 applications a year.

This office has organized and supervises a plan by which mental patients are boarded in private homes. At present there are approximately 220 such patients on boarding care outside the hospitals.

Under the present public health program of the State, with Deputy State Health Officers employed on a full-time basis in each of the counties, and with the City of Baltimore having a large well-organized health department, mental hygiene clinics can be organized and conducted for State-wide coverage.

Mental health clinics should be established at points convenient to all residents. With public education and provisions made for attendance by qualified psychiatrists and nurses with special training in psychiatry, potential candidates for institutional care could be discovered and, in many instances, through follow-up service, be diverted from their current drift back to a state of normalcy. The costs of such program, while large, should be more than balanced by the cost of institutional care thus obviated.

Public education, resulting in early case finding, well-staffed clinics, and treatment of potential institutional patients, should materially affect the number of admissions to mental hospitals and accelerate the discharge or parole of patients to the follow-up care of the clinics. Hence, the number of beds required for this type of patient will gradually be reduced.

The 79th Congress enacted Public Law 487, known as the "National Mental Health Act." Its purpose is "the improvement of the mental health of the people of the United States through the conducting of researches, investigations, experiments, and demonstrations relating to the cause, diagnosis, and treatment of psychiatric disorders; assisting and fostering such research activities by public and private agencies, and promoting the coordination of all such researches and

activities and useful application of their results; training personnel in matters relating to mental health; and developing, and assisting States in the use of the most effective methods of prevention, diagnosis, and treatment of psychiatric disorders."

Under this Act, \$30,000,000 is made available to the Surgeon General of the United States Public Health Service for allotment to the States. The Surgeon General is authorized to work with "the State Health authority except that in the case of any State in which there is a single State agency, other than the State health authority charged with responsibility for administering the mental health program of the State, it means such other State authority."

Under this stipulation, Federal funds for carrying out the purposes stated in the Act are made available. The 1947 General Assembly enacted Chapter 716, under which the State Board of Health is designated as the State agency to execute this program (Appendix E).

INSTITUTIONS FOR THE CARE OF THE MENTALLY ILL

Twenty-three institutions² in the State maintain 9,648 beds for the care of patients with nervous and mental disorders and feeble-mindedness.

Five of the 23 institutions, maintaining a bed complement of 8,337, are owned and operated by the State and represent 86.4% of the total number of in beds use for patients of this category.

STATE-OWNED INSTITUTIONS

Crownsville State Hospital, located at Crownsville in Anne Arundel County, is devoted entirely to the care of nonwhite patients. The bed complement of this institution is 1,234, which is 14.8% of all State-owned beds for mental patients, or 12.7% of the total number of beds in the State. Since this is the only facility in the State for the care of nonwhite mental patients, there are set up divisions for feeble-minded, mental patients having tuberculosis, criminally insane, and mentally ill.

Following is an excerpt from *The Maryland State Budget*:³

The Crownsville State Hospital is located at Crownsville, Anne Arundel County, Maryland. The institution is owned by the State and was created by Chapter 250, Laws of Maryland 1910, for the care and treatment of the colored insane and feeble-minded.

The property comprises 1,271 acres and the value of the land, buildings and equipment is \$2,761,982.13. The average population during the 1944 fiscal year was 1,520 at a per capita cost of \$272.

Methods of Admission: All patients from Baltimore City and the County (excepting those having criminal charges) require certificates of two qualified physicians who have practiced five years or more, with an order from the Department of Public Welfare in case of city patients and an order from the County Commissioners of their native County, if a County charge. Cases appearing in the Criminal Court are committed on an order signed by the Judge of the Criminal Court. Patients are also transferred here from either the Maryland Penitentiary or House of Correction on order of the Commissioner of Mental Hygiene, in accordance with authority invested by Section 48, of Article 59, of the Annotated Code of Maryland.

¹The 1947 General Assembly enacted Chapter 327 to add five advisory members to the Commission.

²Including Phipps Psychiatric Clinic, Johns Hopkins Hospital.
³*Op. cit.*, p. 188.

Rosewood State Training School, another of the five State-owned institutions in this group, is located at Owings Mills in Baltimore County. Its admissions are limited exclusively to feeble-minded white patients. Its present capacity is 1,386. While admission is limited to patients between the ages of six and 16 years, patients once admitted may remain for life or until discharged. The beds at Rosewood were included in this survey, but were eliminated from the tabulations of available beds for mental patients in the State when compared with the maximum established in Public Law 725.

The following is an excerpt from *The Maryland State Budget*:¹

The Rosewood State Training School, formerly known as the Maryland Asylum and Training School for the Feeble-minded, but which name was changed by Chapter 187, Acts of 1912, is located at Owings Mills, Maryland. It was incorporated in 1888 and opened in February 1889 with the admission of seventeen patients. . . .

There is a hospital building, thirteen cottages for children, two school buildings, an administration building, laundry, kitchen building, power house, water treatment plant, sewage disposal system and a number of farm or out buildings erected on the farm of 587 acres. The property has an inventory value of \$2,442,176.

The annual average population of children in 1944 was 1,165 and the per capita cost was \$356.00.² The function and purpose of the institution is the education, training, care and treatment of feeble-minded children.

Springfield State Hospital at Sykesville in Carroll County maintains 3,011 beds. This hospital is intended primarily to serve the Western counties, including Garrett, Allegany, Washington, Frederick, Montgomery, and Carroll counties. Its records show that residents from every county in the State and a large number from the City of Baltimore are accepted here.

One department of 100 beds is reserved for the care of mental patients found to have tuberculosis. In this department there are 50 beds for female and 50 beds for male patients. Patients at Spring Grove State Hospital and Eastern Shore State Hospital, who are found to have tuberculosis, are transferred to the tuberculosis section at Springfield.

Psychiatric epileptic patients are centered also at Springfield. For this type of patient, there is a colony of 466 beds.

The following is an excerpt from *The Maryland State Budget*:³

The Springfield State Hospital is located at Sykesville, Carroll County, Maryland. This State Institution for the care and treatment of the white insane was established by Chapter 231, Acts of 1894.

The property consists of 1,391 acres. The inventory value of land, buildings and equipment is \$3,726,161. The average population in the 1944 fiscal year was 2,959, at a per capita cost of \$282.⁴

After authorization has been received from the Commissioner of Mental Hygiene, patients are accepted for admission if accompanied by commitment certificates of two physicians and an order of the Department of Public

Welfare of Baltimore City, or the County Commissioners of the County of which they are residents, or by Court order.

All patients are first received at the Hubner Building, where they are routinely given thorough physical examinations. Mental examinations are made by assigned physicians who present the cases with written abstracts before the entire staff within a month.

The hospital has a well equipped operating room where minor surgery is done by the resident staff and major by competent consulting surgeons.

The tubercular unit cares for all the white tuberculous insane for the entire state.

An eye clinic is conducted at the hospital twice monthly by a specialist from Baltimore.

Patient statistics for the 1944 fiscal year are as follows: 591 admissions; 188 deaths; 423 discharges. . . .

At the beginning of the fiscal year there were 615 on parole, or otherwise absent, and at the end 529. At the end of the fiscal year the total number of patients in the hospital was 2,984.

Spring Grove State Hospital located at Catonsville, just outside the limits of Baltimore City, has 2,214 beds. Its service area includes: Howard, Baltimore, Harford, Anne Arundel, St. Mary's, Charles, Calvert, and Prince George's counties and Baltimore City.

The white male and female criminally insane from the entire State are committed here. For this purpose, there are 61 beds for male and 60 for female patients.

The following is an excerpt from *The Maryland State Budget*:⁵

The Spring Grove State Hospital is located at Catonsville, Baltimore County, Maryland.

This hospital is the third oldest hospital in the United States for the care and treatment of the mentally sick. It was founded in 1797. It was first incorporated as "The Maryland Hospital" and was located on the present site of the Administration Building of the Johns Hopkins Hospital.

It was established by Article 44 of the Annotated Code of Maryland, and is devoted exclusively to the treatment of white, insane, male and female citizens of Maryland.

The property consists of 637 acres; the inventory of land and buildings and equipment is \$4,175,586.40. The average population for the fiscal year of 1944 is 2,156. The per capita cost in the fiscal year of 1944 is \$294.⁶

Eastern Shore State Hospital, located at Cambridge in Dorchester County, has 492 beds. It was established to render service to the mentally ill of the Eastern Shore. Patients are admitted from Cecil, Kent, Queen Anne's, Caroline, Talbot, Dorchester, Wicomico, Worcester, and Somerset counties.

In line with the practice of grouping certain types of patients at the various institutions, this hospital is the center for alcoholic patients and drug addicts.

The following is an excerpt from *The Maryland State Budget*:⁷

The Eastern Shore State Hospital is two and a half miles southeast of Cambridge, Dorchester County, on State Highway No. 16. It was established by Chapter 245, Acts of 1912, for the care of white mental defectives and mentally ill adults of the Eastern Shore. The buildings were accepted and first used in 1915. Since 1939 it has

¹*Op. cit.*, p. 194.

²The per capita allowance for 1948 was set at \$733.00.

³*Op. cit.*, p. 197.

⁴The per capita allowance for 1948 was set at \$580.00.

⁵*Op. cit.*, p. 201.

⁶The per capita allowance for 1948 was set at \$600.00.

⁷*Op. cit.*, p. 191.

received all white drug and alcoholic addicts court-committed in the state. It now furnishes all psychiatric consultation and mental hygiene service requested by public agencies and practicing physicians of the nine Eastern Shore Counties.

Emergency commitments are arranged by telephone discussion with the personal physician or the proper county or state authority; court commitments are accepted on presentation of the court orders; all other admissions are arranged after direct field investigation by a member of social service or medical staff.

The property consists of 395 acres of land and water, the necessary buildings and equipment, with a total inventory value of \$981,337. During the fiscal year 1944 an average daily patient population of 459 was cared for at a per capita cost of \$368.¹ There were discharged as recovered 47% as many mentally ill as were admitted.

PROPRIETARY INSTITUTIONS

The proprietary hospitals offering service to the mentally ill average 40 beds per institution. One has a total of 85 beds and another 69 beds. The remainder have 50 beds or less with the smallest maintaining only 12 beds.

There are three important nonprofit institutions for the care of the mentally ill. They are The Seton Institute, with 396 beds maintained and operated by a Catholic Order; the Sheppard and Enoch Pratt Hospital, with 300 beds operated as a nonprofit corporation; and the Phipps Psychiatric Clinic, a part of the Johns Hopkins Hospital, with 87 beds. All of these are located in the vicinity of Baltimore City.

One other institution for the care of mentally ill patients in the State is maintained by Allegany County at Cumberland. This is only a vestigial remnant of a county home. In this institution are 96 beds for the care of mental patients largely on a custodial basis.

The Bowditch Hospital School, at Ruxton in Baltimore County, and the Silver Cross Home for Sane Female Epileptics, at Reisterstown in Baltimore County, both nonprofit institutions, were included in the survey; but because they limit their work to the care of epileptics, their bed totals were excluded from the tabulations of mental hospital beds.

Acceptable beds

The inventory of institutions rendering services to the mentally ill was reviewed for the purpose of reducing it to those caring only for psychotic patients. Institutions limiting admissions to feeble-minded or epileptic patients were eliminated from the final tabulation. Beds in excess of normal capacity and those in institutions which had inadequate facilities and personnel or presented other hazards were also deleted.

After such deletions were made, it was found that 7,278 acceptable beds were in service in the State.

Standards

On the basis of the United States Public Health Service standard for this category of 5.0 beds per 1,000 population, and a State-wide population of 2,017,971,² there should be 10,090 mental hospital beds available

in the State. The number of existing acceptable beds is, therefore, inadequate by 2,812 beds.

This shortage is evidenced by the fact that the total number of beds in service for this type of patient exceeds the total normal capacity of the institutions by 839 beds. This overcrowding is accomplished by reducing the floor space per patient. In the State-owned institutions, the standard floor space is 45 square feet per regular bed and 50 square feet per bed in the infirmary and in the section for the criminally insane, which is low compared with accepted standards of 80 square feet per bed.

The unsatisfactory conditions resulting from overcrowding have been made more acute by the shortage of personnel. The isolated locations of the State-owned mental hospitals and the nature of the work have contributed to the personnel shortage.

Maryland's mental hygiene problem is today complicated by the cumulative effects of the war during which construction was prohibited and personnel commandeered for war service, and of the postwar period during which personnel for this type of service have been practically unobtainable.

The State Board of Mental Hygiene is aware of the shortage of facilities, both for patients and for the housing of employees. In its request to the 1947 General Assembly, it rated employees' housing facilities as of first importance. This is logical in that proper housing is necessary in order to attract personnel to the isolated locations of the mental hospitals. Without qualified personnel in adequate numbers, therapeutic programs cannot be undertaken satisfactorily. The institutions then fail in the most important aspect of their programs, which is rehabilitation and return of their patients to society, and revert to the old program of merely accumulating the mentally ill. The General Assembly recognized the urgency of the need and appropriated funds for employees' quarters.

A program for the construction of 2,812 additional beds would entail a large outlay of funds and should be planned over a period of years as such funds can be made available and used effectively.

Since the State-owned mental hospitals are self-contained communities, the additions probably will require the expansion of utilities. These may be expected to entail important expenditures and, hence, cause a slowing-up of the program.

Psychiatric departments in general hospitals

One of the most important phases of the program is the provision of psychiatric departments in general hospitals properly spaced across the State. These departments would supply a place locally for the person who suddenly has become disturbed and unmanageable. Such conditions are at time transitory episodes not due to actual mental illness. Other conditions which fall in the category of mental illness which would be of short duration could be cared for in such departments.

These departments, having other staff specialists available in addition to a psychiatrist, could institute diagnostic and therapeutic services, and thereby screen

¹The per capita allowance for 1948 was set at \$778.00.

²United States Bureau of the Census, Estimated Civilian Population, 1945.

patients so that a minimum of time is lost. Only those patients unable to cooperate and requiring special facilities need be referred to the mental hospitals.

Such psychiatric departments should be supplemented by outpatient service, caring for patients who do not require institutional care and for postinstitutional patients.

Allocation of beds

For these reasons, construction of psychiatric units as additions to general hospitals was given "A" priority. To promote better distribution of services to mental patients, "B" priority was given new facilities at new locations.

The allocation of facilities by race was calculated on the basis of estimates supplied by the Bureau of Vital Statistics of the State Department of Health (Appendix J).

A conference was held with Dr. George H. Preston, Commissioner of Mental Hygiene, to integrate the planning of the Bureau of Mental Hygiene and of the Hospital Survey Committee. As a result of this conference 2,812 additional beds, sufficient to bring the ratio up to 5.0 beds per 1,000 population, were tentatively allocated according to the schedule shown in Table U.

The Hospital Survey Committee, having reviewed this program with the Board of Mental Hygiene, considers the additional facilities to be needed for the care of the mentally ill, and is of the opinion that the

quickest way to get relief in this field is to build additions to existing hospitals. However, it seriously questions the desirability of continuing to build to the already huge institutions. Consideration should be given to the establishment of one or more new institutions according to the geographic needs of the State.

It is understood that expansion of utilities at existing institutions is already necessary and that, before additional patient facilities can be added, many of the utilities in these institutions require great expansion. Now would seem to be the time to make a decision as to future policy.

If these additions are made, anticipating any such growth as herein contemplated, it would tend to establish as policy the indefinite expansion at these locations. If a change of policy were adopted, namely, the establishment of facilities at new locations, it would seem necessary to restudy the grouping of types of patients within all of the institutions.

The Committee is not satisfied that the values of concentrating this construction at a new location have been fully explored.

The restudy of this possibility is such a protracted process that this Committee does not feel justified in delaying the publication of the report to pursue inquiries. It takes no stand as between the two possibilities, but refers the questions to the State Board of Health and its Advisory Council on Hospital Construction for consultation with the Board of Mental Hygiene for final determination.

If construction follows these allocations listed, the number of beds for mentally ill patients will be on the ratio of 5.0 beds per 1,000 population; the number of beds allocated for nonwhites will be in the same proportion as the nonwhite population is to the total population; and psychiatric units will be reasonably available to all residents of the State.

It will be noted that all of the beds required to bring the total up to the United States Public Health Service standard were allocated to State-owned hospitals with the exception of the psychiatric beds. Should any projects be initiated for the construction of additions to existing nonprofit institutions, or for the establishment of new nonprofit mental hospitals, allotments of beds should be taken from the number now allocated to the State-owned institutions which would be relieved by such construction.

Senile patients

It is an established fact that active disturbed mental patients and those who present a danger to themselves and others can be cared for more properly in the environment of the specialized facilities in mental or psychiatric hospitals. However, there are those, such as the senile patient, whose requirements are primarily domiciliary and hygienic care, and some question might be raised as to their proper placement in mental hospitals. If left alone, they frequently deteriorate into a state of mental, physical, and environmental indifference. For their physical well being, they need considerable help and attention to maintain standards

TABLE U: ALLOCATION OF PROPOSED ADDITIONAL BEDS FOR MENTAL PATIENTS

NAME OF INSTITUTION	NORMAL BED CAPACITY	ADDITIONAL BEDS	
Springfield State Hospital, Sykesville	2,688	Male disturbed patients	100 planned
		Female disturbed patients	100 planned
		Infirmary	100 planned
		Convalescent patients	100 planned
		Senile patients	300 needed
		Relief of overcrowding	159 needed
Spring Grove State Hospital, Catonsville	2,013	Female admissions building and convalescent section	250 planned
		Criminally insane and psychopaths	350 planned
		Relief of overcrowding	300 needed
Crownsville State Hospital, Crownsville ¹	1,044	Relief of overcrowding	591 needed
Eastern Shore State Hospital, Cambridge	466	Increased capacity	221 needed
University Hospital, Baltimore City	0	Psychiatric unit	125 recommended
Memorial Hospital, Cumberland	0	Psychiatric unit	31 recommended
Union Hospital, Elkton	0	Psychiatric unit	15 recommended
Peninsula General Hospital, Salisbury	0	Psychiatric unit	20 recommended
Frederick City Hospital, Frederick	0	Psychiatric unit	20 recommended
Prince George's General Hospital, Cheverly	0	Psychiatric unit	10 recommended
Washington County Hospital, Hagerstown	0	Psychiatric unit	20 recommended
		TOTAL.....	2,812

¹Reserved for nonwhite patients.

of health and cleanliness. For their mental well being, they need more than food and a bed in an attic or a converted storage room.

With the present inadequacy of mental hospital beds, the question presents itself: Should the capacities of mental hospitals be expanded to include the senile type of patient, or should they be placed in another type of institution, or can they be cared for in subsidized private homes?

The institutions for the care of the nervous and mental patients are all operating far beyond their rated capacities. Because of their isolated locations, the nature of their work, to which not all persons are suited, and because of salaries offered, their problems are made more acute by the shortage of personnel. Buildings which can be manned are in operation and universally crowded.

While efforts are being made to solve the facilities and personnel problems, continuing shortages have influenced policies resulting in a selection of cases for admission to mental hospitals. The senile type of patient has been practically eliminated. Such elimination is not necessarily dictated by written policy. It is an outgrowth of the repeated failure to have such patients admitted for care. Also, physicians familiar with the problems of the mental hospitals hesitate to recommend commitment of senile patients, suggesting instead care in the home with the employment of some help, or transfer of the patient to a nursing home.

Since senile patients already are practically eliminated from admission to overcrowded mental hospitals, they should be cared for in new facilities. It is quite apparent that the chronic disease hospitals now planned will fall far short of the needs of the chronically ill.

The construction of additional separate facilities for the senile patients at the existing State mental hospitals also runs counter to the hope that these institutions will not continue to expand in size.

In either approach to a solution, new facilities are required for senile patients and the policy must be established for their care either under the mental health or chronic disease program. Further study is recommended, in which serious consideration should be given to the construction of facilities specifically for senile patients. Such new facilities may be either independent hospitals, or additions to mental or chronic disease hospitals.

A more immediate partial solution to the problem can be accomplished by encouraging nursing homes and foster homes to accept such patients.

Feebleminded patients

Feebleminded children already have been provided for at the Rosewood State Training School. The isolation and protection provided these patients appear to be a proper procedure. The child handicapped through lack of mental faculties presents dangerous potentialities in a community and, if kept at home, is demoralizing to the other members of the family.

This type of patient in an institution for the care of feebleminded patients is in an environment compatible

with his capabilities. Training programs geared to his capacity can usually develop the patient to the maximum extent of his mental limitations.

While admissions to Rosewood are limited to patients between the ages of six and 16 years, once admitted, they are continued as patients until discharge or death. As a result, there is an accumulation of older patients to the point where, of 1,386 patients, 216 are between the ages of 16 and 21 years, and 660 are over 21 years of age.

Since there is a waiting list of those needing the type of service offered at Rosewood, it is desirable to provide other or additional facilities to which patients can be transferred once they have attained the predetermined age for transfer, such as 21 years. Unless some such program is undertaken, candidates for admission may remain on the waiting list through the entire period when some progress might be made under a training program. Others may be forced to wait until they are 16 years of age, beyond which admission is not permitted.

It is illogical to place the older feebleminded patients in chronic disease hospitals. Most of the regular patients who will qualify for admission to such institutions will be disabled or physically feeble but will have their mental faculties. The feebleminded patients would be largely incompatible with the cardiacs, hypertensives, arthritics, and others having long-term illnesses. It is recommended, therefore, that separate facilities for older feebleminded patients be erected at places other than in conjunction with the chronic disease hospitals.

Such additional facilities for feebleminded patients placed at one of the established State mental hospitals would have some advantages. The patients are not too unlike those already cared for in these institutions. There is sufficient acreage already owned.

However, Spring Grove State Hospital and Springfield State Hospital already are very large institutions and both are faced with an acute need for additional facilities for their present patient load. The feebleminded patients at the time of transfer would present the problem of accommodating themselves to the new environment and might become difficult to manage. The period of adjustment may be long. The disadvantages to the institutions and the patients would weigh against establishing facilities for the older feebleminded at the present mental hospitals.

It is more logical to place such additional facilities at Rosewood. The Rosewood personnel is trained in handling this type of patient. The patients themselves would not be retarded by the need to become acclimated in an entirely new environment. Instead, their transition from the division of younger patients to the facilities for overage patients would be gradual. Rosewood has sufficient acreage for such additional buildings, but its utilities would need to be expanded.

Conclusions

There is a serious need for additional mental hospital facilities.

These additional facilities should include psychiatric departments in general hospitals.

Personnel housing facilities are needed at the State-owned mental hospitals. Such construction is essential to the establishment of proper service to the patients in the existing beds.

There is a need for facilities for the care of senile patients. The chronic disease hospitals now planned will fall short of the needs of the chronically ill and, therefore, will not allow for the inclusion of senile patients; nor is this desirable.

Facilities are needed for the care of feeble-minded above the age of 16 years.

The mental health program under Federal aid and the establishment of outpatient departments at hospitals in conjunction with psychiatric departments are needed for case finding and preventive work and ambulatory treatment.

Psychiatric departments in general hospitals will furnish educational and training opportunities to physicians, nurses, and auxiliary personnel and, at the

same time, establish this type of case as one with potentialities for recovery rather than one of hopeless outlook.

Recommendations

It is recommended that:

1. Construction of mental hospital facilities be instituted as rapidly as possible to bring the total to a ratio of 5.0 beds per 1,000 population.
2. Construction of psychiatric departments of general hospitals be encouraged.
3. Additional facilities be constructed to permit segregation by age of patients otherwise now cared for at Rosewood.
4. Facilities for the care of senile patients be constructed as separate departments of the State hospitals, or at new locations.
5. The mental health program for which Federal matching funds have been made available be instituted as early as possible.

Chapter 10. PUBLIC HEALTH FACILITIES

PUBLIC health facilities and services are supplemental to the services of physicians and medical institutions. They are an important part of a complete health program which envisions proper preventive and curative medical and surgical services available financially and geographically to everyone.

Health offices are established in every county and in Baltimore City (Map 7). Under this arrangement, geographic distribution is achieved. Joint financial participation by the State and local governments contributes to uniformity and integration of programs and policies.

The problems in this field are those of adequate housing, suitably located, containing sufficient space to carry on the program.

At present, most health centers and clinic facilities throughout the State are located in rented buildings, or use space in public buildings by sufferance. In many instances, the quarters are inadequate or unsatisfactory.

Because of the limited funds available for this program, consideration was given only to administrative centers, which include some clinic facilities. Auxiliary clinics were omitted for the present.

The housing accommodations of each center were surveyed on the basis of visits and reports by health officers. The findings were reviewed with the Director of the State Department of Health and the Commissioner of Health of Baltimore City. Each center was considered as to size, location, and structure.

The areas in which new facilities were needed urgently were listed, with those least satisfactory being placed at the top of the list. At the conclusion of the review, the first seven centers listed were as follows:

1. Carroll County
2. St. Mary's County
3. Calvert County
4. Southern Health District, Baltimore City
5. Caroline County
6. Worcester County
7. Frederick County

Carroll County is at present without a general hospital. The present interest of the community is in the establishment of a diagnostic health center. This diagnostic health center should be so designed and located that it will later serve as the nucleus for a hospital.

The public health facilities of *St. Mary's County* are located in entirely unsatisfactory quarters on the second floor of a frame commercial building. New quarters should be provided at the St. Mary's Hospital, under a building program which would entail the replacement of the old hospital structure which is now attached to the new hospital. The new addition is provided for under allocation of general hospital beds with which the funds for public health facilities could be combined.

The public health department of *Calvert County* is in a very unsatisfactory location. Under "General Hospitals" (Chapter 6) it is recommended that the

Calvert County Hospital be replaced. When this is done, space should be provided in the new hospital for the county health offices and clinics.

Baltimore City is divided into eight health districts, shown on Map 7, as follows:

The *Southern Health District* does not have any building at present. Some funds have been appropriated by Baltimore City for construction of a facility. Since the Southern District is heavily populated and in urgent need of quarters, this project is recommended.

The *Eastern Health District* is served by a building which has been adapted to the needs of a health center, but is inadequate. A new building constructed for the purpose is needed at this location and is considered urgent by the Health Commissioner.

The *Southeastern Health District* headquarters is established in an old school building which, while meeting the need, is not satisfactory.

The *Western Health District* is served by a facility at 617 West Lombard Street and by the Druid Health Center. The Commissioner of Health considers additional space at the Druid Health Center as necessary.

The *Southwestern, Northwestern, Northern, and Northeastern Health Districts* have no headquarters buildings at present. As the more urgent needs in other districts are met, plans should go forward for centers in these districts, so that eventually each health district will be serviced by a headquarters building located within the district.

Caroline County is in need of a new public health center. There is local interest in the establishment of a community health center to include about 15 beds along with public health facilities.

It is generally recognized that such a small unit is inefficient to operate. A false sense of security is developed around a hospital unit of such limited scope, with the result that patients requiring the services usually offered only in larger institutions receive inadequate care. This results in delay in obtaining service or the hospitalization of cases beyond the scope of the institution. A public health center with ambulance service to Easton brings hospital care sufficiently close for safety. Plans are under consideration for an addition to the Easton Hospital which would increase its capacity sufficiently to provide for the care of residents from Caroline and Talbot counties. The allotment of beds to this area has been made large enough to meet this need.

A public health facility for Caroline County falls in the "A" priority bracket, whereas a hospital unit or community health center, such as is being considered locally, would fall in the "B" bracket, if approved at all.

Worcester County is in need of better quarters for its county health offices. At present the construction of a hospital is being considered by the residents of this area. Should the hospital materialize, quarters for the



Key to Map 7

ALLEGANY COUNTY

A—Cumberland
B—Mt. Savage
C—Frostburg
D—Zihlman
E—Lonaconing
F—Westernport
G—Cresaptown

ANNE ARUNDEL COUNTY

A—Annapolis
B—Lothian
C—Davidsonville
D—Odenton
E—Glen Burnie
F—Linthicum
G—Pasadena
H—Parole

BALTIMORE COUNTY

A—Towson
B—Essex
C—Middle River
D—Pikesville
E—Randallstown
F—Reisterstown
G—Chase
H—Catonsville
I—Cockeysville
J—Turners Station
K—Sparrows Point
L—Halethorpe
M—Overlea
N—Dundalk

CALVERT COUNTY

A—Prince Frederick

CAROLINE COUNTY

A—Denton
B—Greensboro
C—Federsburg

CARROLL COUNTY

A—Westminster

CECIL COUNTY

A—Elkton
B—Cecilton

CHARLES COUNTY

A—La Plata

DORCHESTER COUNTY

A—Cambridge

FREDERICK COUNTY

A—Frederick

GARRETT COUNTY

A—Oakland
B—Grantsville
C—Friendsville
D—Kitzmiller

HARFORD COUNTY

A—Belair
B—Edgewood
C—Aberdeen

D—Havre de Grace

HOWARD COUNTY

A—Ellicott City

KENT COUNTY

A—Chestertown

MONTGOMERY COUNTY

A—Rockville
B—Poolesville
C—Damascus
D—Olney
E—Gaithersburg
F—Colesville
G—Bethesda
H—Silver Spring
I—Takoma Park

PRINCE GEORGE'S COUNTY

A—Upper Marlboro
B—Hyattsville
C—Aquasco
D—Laurel
E—Fairmount Heights
F—Lanham

QUEEN ANNE'S COUNTY

A—Centerville

ST. MARY'S COUNTY

A—Leonardtown

SOMERSET COUNTY

A—Princess Anne
B—Crisfield

TALBOT COUNTY

A—Easton

WASHINGTON COUNTY

A—Hagerstown

WICOMICO COUNTY

A—Salisbury

WORCESTER COUNTY

A—Pocomoke City
B—Snow Hill
C—Berlin

BALTIMORE CITY

A—City Health Department
Municipal Office Building (2)
B—Western Health District
617 West Lombard Street (1)
C—Druid Health Center
1313 Druid Hill Avenue (17)
D—Southeastern Health District
901 South Kenwood Avenue (24)
E—Eastern Health District
1923 East Monument Street (5)
F—Northeastern Health District
G—Northern Health District
H—Northwestern Health District
I—Southwestern Health District
J—Southern Health District

public health office should be included. If it does not, a separate public health facility should be developed.

The county health office in *Frederick* is located in a very old structure which is unsatisfactory. The *Frederick City Hospital* is giving active consideration to plans for an additional wing. The quartering of the public health service in this wing would be a move toward efficient use of personnel and facilities.

Both the State Department of Health and the Department of Health of Baltimore City are in urgent need of more adequate housing for their administrative headquarters. However, as presently contemplated, such construction probably would not qualify for assistance under the provisions of the Federal Act. Therefore, no opinion is expressed on the degree of their urgency in relation to other projects mentioned herein.

The needs of the other counties and of Baltimore City are generally only slightly less urgent than the seven centers listed. Some areas are making plans for new structures to house their public health departments. As funds become available and the more urgent needs are provided for, consideration should be given to the plans for new facilities in those areas.

Conclusions

The City of Baltimore is divided geographically into eight health districts. This is a satisfactory arrangement organizationally. There is a need for housing for the headquarters office and clinic facilities in most of the districts.

The arrangement by which each county has its own county health department, which is a part of the State

Health Department organizationally and financially, is eminently satisfactory.

In the counties, health centers should be located in hospitals wherever possible to make efficient use of personnel and equipment and for many other compelling reasons.

Most of the health centers are located in structures which were not designed for this purpose and are unsatisfactory from the standpoint of function.

The auxiliary clinic locations are, in most instances, in satisfactory locations geographically, but are in need of better housing and more space.

Recommendations

It is recommended that funds for construction of public health service facilities be allotted to the following areas as local matching funds become available. They are arranged in order of urgency.

1. Carroll County
2. St. Mary's County
3. Calvert County
4. Southern Health District, Baltimore City
5. Caroline County
6. Worcester County
7. Frederick County

It is further recommended that where hospital construction is being planned in the counties, the public health facilities should be planned as a part of such construction.

Federal funds up to 10% of the total funds available to the State should be allocated to public health facilities.

PART IV

PRIORITIES

Chapter 11. PRIORITIES SYSTEM

IMPORTANT deficiencies in each of the five categories of hospitals and limited funds available for grants-in-aid for the construction of the needed facilities made the establishment of priorities necessary.

It was considered essential to formulate a method for the establishment of priorities within the categories as well as between them which would embody the principles enumerated in Subpart E, Sections 53.41 through 53.47 of the Regulations (Appendix B).

Because of the autonomous character of general hospitals, a special method was used in determining priorities within that category.

A different set of priority policies was applied to tuberculosis, chronic disease, and mental institutions, these being largely State-owned and generally available to all residents of the State.

In the field of public health, an appraisal of existing facilities was used.

Establishment of priorities between the categories was found to be a complex undertaking. However, a method was devised which gives reasonable comparative priority status to the projects in the different types of facilities.

GENERAL HOSPITALS

The State was divided into general hospital service areas. Each of these represented the delineation of the area served by the general hospital or hospitals within the area. In this category priorities were established between areas.

On the basis of standards issued by the United States Public Health Service and the judgment of the Committee, these areas were classified as base, intermediate,

and rural. The minimum standard in each type of area was established as:

Rural area—2.5 beds per 1,000 population

Intermediate area—4.0 beds per 1,000 population

Base area—4.5 beds per 1,000 population

The over-all State standard was set at 4.5 beds per 1,000 population.

The differential between the State standard and the rural area standard left 2.0 beds per 1,000 population, which were placed in what was termed the *pool*. The differential in the case of intermediate areas left 0.5 beds per 1,000 population for the pool.

Assignments were made from the pool to areas which needed more beds than the minimum standards. In making allocations from the pool, such circumstances as high utilization of existing facilities, rapidly changing population, and other factors were taken into consideration. The resultant figures, that is, the area standard supplemented by allocations from the pool, were considered the determined needs.

The number of existing beds was established by the survey. The normal number of beds for which each hospital had been constructed was reduced by the number of beds located in buildings classified as unacceptable, thus arriving at the acceptable normal bed capacity.

The per cent to which the determined need was met was established by dividing the number of acceptable beds by the determined need. By this process, the per cent of met need was established (Table V). In this

TABLE V: PRIORITY POINTS FOR GENERAL HOSPITALS, MET NEED ADJUSTED BY UTILIZATION OF EXISTING FACILITIES

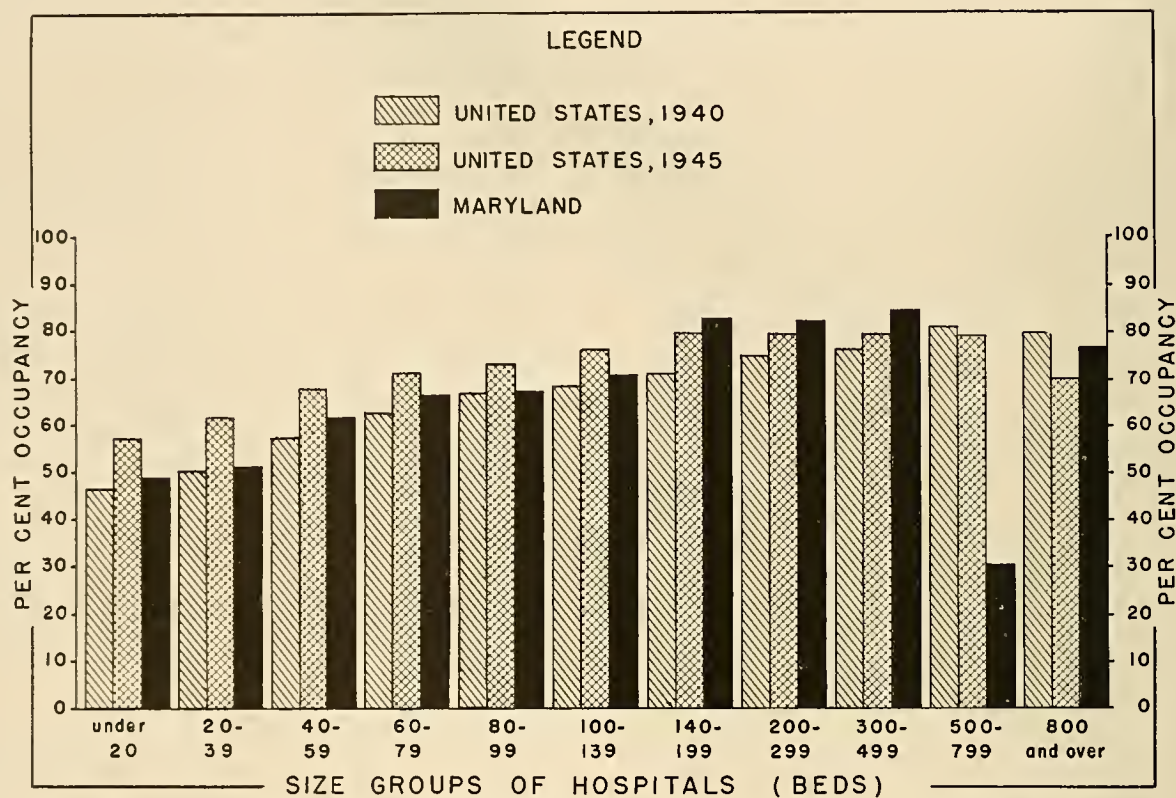
AREA	TOTAL BEDS NEEDED	ACCEPTABLE NORMAL BED CAPACITY	PER CENT OF MET NEED ¹	PER CENT OCCUPANCY	STANDARD PER CENT OCCUPANCY R—60% I and B—70%	DIFFERENTIAL BETWEEN ACTUAL AND STANDARD PER CENT CAPACITY	PRIORITY POINTS ²	ORDER OF PRIORITY
R-1, Garrett County.....	46	—	—	—	—	—	0.0	A { 1 2 3 4 5 6
R-2, Calvert County.....	26	—	—	—	—	—	0.0	
R-6, Worcester County.....	60	—	—	—	—	—	0.0	
I-2, Washington County.....	280	168	60.0	109.5	70	39.5	20.5	
I-6, Talbot and Caroline Counties..	179	87	48.6	90.4	70	20.4	28.2	
R-5, Kent and Queen Anne's Counties	63	25	39.7	69.2	60	9.2	30.5	
I-4, Montgomery and Prince George's Counties.....	887	519	58.5	71.7	70	1.7	56.8	B { 7 8 9 10
I-5, Cecil County.....	128	72	56.3	62.8	70	— 7.2	63.5	
R-4, St. Mary's County.....	70	45	64.3	57.5	60	— 2.5	66.8	
I-8, Wicomico County.....	247	177	71.7	74.2	70	4.2	67.5	
I-7, Dorchester County.....	112	65	58.0	59.5	70	—10.5	68.5	C { 11 12 13
B-1, Baltimore Base Area.....	6,272	4,710	75.1	74.0	70	4.0	71.1	
I-3, Frederick County.....	207	166	80.2	71.5	70	1.5	78.7	
I-1, Allegany County.....	485	410	84.5	67.3	70	— 2.7	87.2	D { 14 15 16
R-3, Charles County.....	49	33	67.3	36.7	60	—23.3	90.6	
R-7, Somerset County.....	43	38	88.4	67.1	60	— 2.9	91.3	

¹Acceptable normal bed capacity divided by total beds needed.

²Per cent of met need minus differential between actual and standard per cent occupancy.

CHART I

OCCUPANCY RATES FOR GENERAL HOSPITALS UNITED STATES AND MARYLAND



SIZE GROUPS OF HOSPITALS	UNITED STATES				MARYLAND	
	AVERAGE NUMBER OF BEDS PER HOSPITAL		PER CENT OCCUPANCY		AVERAGE NUMBER OF BEDS PER HOSPITAL	PER CENT OCCUPANCY
	(BEDS)	1940	1945	1940	1945-46	1945-46
under 20	13.3	14.0	46.4	57.7	17.0	49.1
20 39	27.2	27.6	50.7	61.8	30.5	51.4
40 59	47.5	48.0	57.2	67.9	46.2	61.7
60 79	68.1	67.6	62.4	71.1	69.8	66.2
80 99	87.1	87.7	66.3	73.1	87.0	67.3
100 139	114.6	115.4	68.6	76.4	115.4	70.9
140 199	164.7	165.2	71.2	79.8	169.6	83.4
200 299	236.5	240.5	74.6	79.3	246.0	82.0
300 499	370.3	365.8	76.0	79.2	358.7	84.6
500 799	607.7	599.2	80.6	78.8	513.0	30.6
800 and over	1,544.2	1,725.6	79.8	70.3	873.0	76.7

manner, the factors which had been taken into consideration in allocating pool beds to individual areas were reflected in the resultant lower per cent of met needs for these areas.

The use made of existing beds being an important index as to the urgency of need for additional facilities, the per cent of met need was modified to reflect the urgency. An institution with an abnormally high utilization or percentage of occupancy¹ would indicate an immediate need for more facilities. Conversely, an institution with a lower than normal rate of occupancy would not appear to be in urgent need of more beds. The degree of the urgency of the need is indicated by the extent of the differential between what is considered a normal rate of occupancy for the size of the institution and its actual rate.

It has been demonstrated that the percentage of occupancy varies with the size of the hospital.² Institutions with less than 100 beds normally operate at an occupancy rate near 60%, whereas large hospitals generally reach 70%, or higher (Chart 1). By this means, rural areas are given special consideration.

Since small hospitals usually are located in the rural areas and larger ones in intermediate and base areas, 60% was established as the normal occupancy rate for hospitals in rural areas and 70% for those in intermediate and base areas.

A comparison was made between the actual rate of occupancy as reported by the hospitals and the established normal. Where experience was higher than normal for the area, the differential of percentage points was subtracted from the percentage of met needs. By this procedure, the figure representing the per cent of met need was changed by the degree of differential between the actual rate of occupancy and the established normal, thus giving the hospital with a high rate of occupancy a lower index and hence, a proportionately higher position on the priority schedule. The resultant figures were termed priority points and were tabulated in increasing order in Table V. They ranged from 0.0 to 91.3.

The priority schedule was then divided into four groups, as follows:

Priority Group	Priority Points	Number of Areas in Priority Group		
		Rural	Intermediate	Base
"A"	0.0—40.0	4	2	0
"B"	40.1—68.0	1	3	0
"C"	68.1—80.0	0	2	1
"D"	80.1—100.0	2	1	0

The arrangement of general hospital service areas and the priority brackets were used later as a control for the establishment of quotas of beds in the priority brackets in the other categories.³

¹Utilization or percentage of occupancy is determined by multiplying the normal bed capacity by 365 and dividing this figure into the days of service rendered in one year, multiplied by 100.

²"Hospitals Registered by the American Medical Association," *Journal of the American Medical Association*, April 20, 1946, Hospital Number.

³See "Bed Quotas in Priority Brackets," Chapter 12.

TUBERCULOSIS, CHRONIC DISEASE, AND MENTAL HOSPITALS

Priorities within the categories of tuberculosis, chronic disease, and mental hospitals were set up on a State-wide basis. Within these categories, projects were considered to be of varying importance.

Highest priority was given facilities constructed as additions to general hospitals. This is in line with current opinion that general hospitals should include facilities for tuberculous, chronic disease, and mental patients. Since general hospitals are located within urban areas, the problems of remoteness from home as a deterrent to patients accepting care, convenience of visitors, and supply of personnel and personnel housing are more readily answered. Under such a program, the scope of service of general hospitals is broadened. At the same time, their educational activities become more inclusive. In the light of the proven fact that tuberculosis can be controlled and its incidence actually reduced, there is the probability that a point eventually might be reached when fewer beds will be needed, at which time those beds added to general hospitals for this purpose could be converted to other uses. Additions to general hospitals for the care of tuberculous, chronic, or mental patients were, therefore, placed in "A" priority.

Rated next in importance in these categories were new facilities at new locations. These should be located in or near population centers, thus overcoming the objections to the present isolated locations of most of the existing institutions. New facilities at new locations therefore were given "B" priority.

Additions to existing facilities were given the lowest, or "C" and "D" priorities.

An exception was allowed for the assignment of higher priority to service and personnel housing facilities. Although not increasing the number of beds for patients when added to or replacing facilities at existing institutions, such improvements are considered imperative to the effective use of existing facilities. The criteria which will govern the granting of such higher priority will be based on the relative size of the project compared with the whole program and the relationship between the cost of the projected construction and the demonstrated resultant increase in the effectiveness of the facilities.

PUBLIC HEALTH FACILITIES

Public health facilities exist in all of the counties and Baltimore City. Under the present system, the distribution of facilities is satisfactory. While most of these facilities could be located in better buildings, with the limited funds available, the inclusion of projects for such facilities was restricted to those which are least satisfactory. Through conference with the Director of the State Department of Health and the Commissioner of Health of Baltimore City, these unsatisfactory facilities were arranged in the order of their urgency and divided as equally as possible among the four priority brackets.

Since the public health services are available throughout the State, the primary need in this category being for housing and not for the extension of services, Federal funds allocated to this type of facility were limited to 10% of the amount of Federal funds available. First priority in this category will be given to facilities which will be constructed as parts of general hospitals.

MET NEEDS BY CATEGORY

The per cent of met need in each category was determined by using the State standards for the various categories and dividing them into the acceptable normal bed capacity in each category. The results are given in the adjoining tabulation.

In the category of general hospitals, the adjusted met needs or priority points were used in the priority determinations on an area level rather than the per

<i>Category</i>	<i>Total Beds Needed</i>	<i>Acceptable Normal Bed Capacity</i>	<i>Per Cent of Met Need</i>
General.....	9,154	6,515	71.2
Tuberculosis.....	3,177	1,743	54.9 { white 71.8 nonwhite 36.2
Chronic disease	4,036	1,713	42.4
Mental.....	10,090	7,278	72.1 { white 73.7 nonwhite 63.5

cent of met need on a State level. When the per cent of met need was adjusted by the differential between the actual rate of occupancy of existing facilities and the established normal rate of occupancy, the resultant order of service areas was developed (Table V).

Chapter 12. ALLOCATION OF PRIORITIES BY CATEGORIES

HAVING thus determined priorities within the various categories of hospitals, it was then necessary to determine a relative priority for each of the various categories of hospitals. The "Schedule of Priorities" (Table W) is based on the method finally devised.

Under the priority system, six general hospital service areas which have less than 40 priority points have "A" ratings. Four of these are rural and two intermediate. Since the priority points for these areas range from 0.0 to 40.0, applications on these projects will be given first consideration for approval. After these areas have been given an opportunity to waive the right or to submit a project attesting their ability to supply their portion of the construction funds, along with assurance as to their ability to finance operation of the project, remaining Federal funds will be held available for projects in the "A" priority bracket in the other categories.

Since the met need in the category of tuberculosis hospitals for nonwhite patients is 36.2% and lower than in the other categories, "A" priority projects will be considered next for tuberculosis facilities for these patients. In order to qualify for "A" priority, projects must be additions to or parts of general hospitals.

Chronic disease, mental, and tuberculosis facilities for white patients, as additions to or parts of general hospitals, will be next in line for approval.

After projects which qualify for "A" priority have been allocated funds or have been eliminated by reason of failure to submit applications, the projects in the "B" bracket will be considered. Under the "B" bracket, general hospital projects, tuberculosis facilities for nonwhite patients, and chronic disease hospital projects, which are new facilities at new locations, will be given equal consideration. Following these, projects for tuberculosis hospitals for white patients and mental hospitals, to be new facilities at new locations, will be considered.

When all such projects have either been approved or set aside because of failure to submit applications, consideration will be given similarly to projects in the "C" and "D" brackets.

BED QUOTAS IN PRIORITY BRACKETS

In order to maintain an equitable balance in the number of beds which might be established in each category, the general hospital bed allocations were used as the control.

The general hospital service areas were listed in the order of their priority points. The number of beds allocated to the six areas in the "A" priority bracket total 374, or 14.2% of the total unmet need in this category (Table W). This percentage of unmet need was established, therefore, as the limit of beds which might be added in the other categories under "A" priority projects.

This same procedure was applied under the other priority brackets with the following results:

<i>Beds to be Added Under "A" Priority 14.2% of Unmet Needs</i>	
General Hospitals.....	374
Tuberculosis Hospitals:	
White.....	67
Nonwhite.....	137
Chronic Disease Hospitals.....	330
Mental Hospitals:	
White.....	315
Nonwhite.....	84
TOTAL.....	1,307

Applied to each priority bracket, the resultant totals for all categories are:

"A" priority.....	1,307 beds
"B" priority.....	1,815 beds
"C" priority.....	5,756 beds
"D" priority.....	330 beds
Total Unmet Needs.....	9,208 beds

As a precaution against the possible situation where one large project might absorb a disproportionate share of the funds available, *no single project may be permitted to use more than 50% of an annual allotment of Federal funds if other acceptable applications are pending.*

TIME LIMITS ON APPLICATIONS

In order to avoid a stagnation of the program by reason of the failure of groups with high priorities to exercise their rights to funds, time limits were established for the filing of projects. Projects which qualify under the "A" bracket will have until April 1, 1948, to file applications.

If Federal funds available for the current period are not entirely exhausted by the approved applications, notice will be sent to other groups according to their priority positions, advising them of the opportunity to submit their project applications. Potential applicants so notified would have until May 1st of the following year to submit their proposals.

This procedure of considering projects semiannually will be followed throughout the life of the program except when available funds would be lost by waiting until the next filing date. In such case, the State agency will call for further project applications on shorter notice.

PRIORITY ADJUSTMENTS

When projects are approved for construction, the priority status of other projects will be reviewed for the purpose of determining the effect of the approved project on the need for other facilities. The priority position of remaining projects will then be adjusted to compensate for the change in urgency of need.

APPEAL AND HEARING PROCEDURE

The State Board of Health shall provide an opportunity for a fair hearing to applicants who are dissatisfied with the action taken on their applications by the State Department of Health.

TABLE W: SCHEDULE OF PRIORITIES

	AREA BASIS		STATE-WIDE BASIS					PUBLIC HEALTH FACILITIES	TOTALS
	GENERAL HOSPITAL BEDS		TUBER- CULOSIS HOSPITAL BEDS		CHRONIC DISEASE HOSPITAL BEDS	MENTAL HOSPITAL BEDS			
			White	Non- white		White	Non- white		
Total beds needed	9,154	Beds Allotted	3,177		4,036	10,090			26,457
Acceptable normal bed capacity	6,515		1,743		1,713	7,278			17,249
Unmet need	2,639		1,434		2,323	2,812			9,208
Per cent met need	By area—0.0% to 88.4%		54.9% 71.8% 36.2%		42.4%	72.1% 73.7% 63.5%			
"A" PRIORITY BRACKET									
"A" priority includes up to 14.2% of unmet need in each category	R-1, Garrett County R-2, Calvert County R-6, Worcester County I-2, Washington County I-6, Talbot and Caroline Counties R-5, Kent and Queen Anne's Counties	46 26 60 112 92 38	Facilities to be constructed as additions to, or parts of, general hospitals					Up to 10% of total funds available	
Beds which may be constructed		374	67	137	330	315	84		
Order of priority by category	1		4	2	3	4			
"B" PRIORITY BRACKET									
"A" + "B" priorities include up to 33.8% of unmet need	I-4, Montgomery and Prince George's Counties I-5, Cecil County R-4, St. Mary's County I-8, Wicomico County	368 56 25 70	New facilities at new locations					Up to 10% of total funds available	
Beds which may be constructed		519	92	190	460	438	116		
Order of priority by category	1		2	1	1	2	2		
"C" PRIORITY BRACKET									
"A" + "B" + "C" priorities include up to 96.4% of unmet need	B-1, Baltimore Base Area I-7, Dorchester County I-3, Frederick County	1,562 47 41	Additions to existing facilities					Up to 10% of total funds available	
Beds which may be constructed		1,650	292	604	1,452	1,389	369		
Order of priority by category	1		1	1	1	1	1		
"D" PRIORITY BRACKET									
"A" + "B" + "C" + "D" priorities include up to 100% of unmet need	I-1, Allegany County R-3, Charles County R-7, Somerset County	75 16 5	Additions to existing facilities					Up to 10% of total funds available	
Beds which may be constructed		96	17	35	81	80	21		
Order of priority by category	1		1	1	1	1	1		

Actions which entitle applicants to a hearing include the following:

- (1) Denial of opportunity to make formal application.
- (2) Rejection or disapproval of application.
- (3) Refusal to reconsider an application.

Appeals from decisions or actions must be made by the applicant, in writing, within 30 days from the date of the decision by the State Department of Health.

The appellant will be notified in writing of the time and place of hearing. The time and place of the hearing will be determined by the State Board of Health.

The appellant is entitled to be represented by counsel. The appellant and other persons interested and concerned with the State Department of Health decision are entitled to present pertinent evidence in any way desired, subject to reasonable procedures of admissibility and methods of presentation.

The appellant is entitled to examine all evidence and to question opposing witnesses.

Such hearing will be held before the State Board of Health.

The decision of the State Board of Health will be made in writing within 30 days from the date of the hearing, and will be based on the evidence presented at the hearing.

A stenographic record of the hearing will be made and, upon the request and at the expense of the appellant, will be transcribed and made available for examination.

SUMMARY

General hospital priorities between areas were based on the acceptable normal bed capacity divided by the total beds needed and adjusted by the differential between what was established as the normal per cent of occupancy for the area and the actual per cent of occupancy. The resultant figures, priority points, were broken into priority brackets as follows:

<i>Priority Group</i>	<i>Priority Points</i>
"A".....	0.0— 40.0
"B".....	40.1— 68.0
"C".....	68.1— 80.0
"D".....	80.1—100.0

Tuberculosis, chronic disease, and mental hospitals were treated on a State-wide basis. "A" priority was given to facilities which will be additions to general hospitals. "B" priority was given to new facilities at new locations. "C" and "D" priorities were given to additions to existing facilities. Allowance was made for the granting of higher priority to projects for service facilities and personnel housing which would increase the effectiveness of existing facilities.

Public health facilities were granted funds up to 10% of the total Federal funds available. The relative priority of projects in this group was established upon the recommendation of the Director of the State Department of Health and the Commissioner of Health of Baltimore City.

The number of beds which may be added in each priority bracket in the categories of tuberculosis, chronic disease, and mental facilities are limited to a per cent of the unmet need equal to that allowed for general hospital beds in the same bracket.

Applications for projects and approvals will be made at six-month intervals.

Adjustment of priority positions will be made as projects affecting the urgency of other projects are approved for construction.

Under the above-described priority program, the projects in the various categories will be considered in the order of their need, based on a comparison between the current met needs and the determined needs, along with the utilization of existing facilities. Rural projects will receive special consideration by reason of the lower normal per cent of occupancy standard. Groups having under consideration the construction of facilities will have equal opportunity to qualify under the program in proportion to the extent and urgency of the needs and the utilization of their existing facilities. Provision is made for appeals and hearings in connection with applications submitted under the Hospital Construction Program.

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APPENDIX A

PUBLIC LAW 725—79th CONGRESS CHAPTER 958—2D SESSION (S 191)

AN ACT

To amend the Public Health Service Act to authorize grants to the States for surveying their hospitals and public health centers and for planning construction of additional facilities, and to authorize grants to assist in such construction.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Hospital Survey and Construction Act."

SEC. 2. The Public Health Service Act (consisting of titles I to V, inclusive, of the Act of July 1, 1944, 58 Stat. 682) is hereby amended by adding at the end thereof the following new title:

"TITLE VI—CONSTRUCTION OF HOSPITALS

"PART A—DECLARATION OF PURPOSE

"SEC. 601. The purpose of this title is to assist the several States—

"(a) to inventory their existing hospitals (as defined in section 631 (e)), to survey the need for construction of hospitals, and to develop programs for construction of such public and other nonprofit hospitals as will, in conjunction with existing facilities, afford the necessary physical facilities for furnishing adequate hospital, clinic, and similar services to all their people; and

"(b) to construct public and other nonprofit hospitals in accordance with such programs.

"PART B—SURVEYS AND PLANNING

"AUTHORIZATION OF APPROPRIATION

"SEC. 611. In order to assist the States in carrying out the purposes of section 601 (a), there is hereby authorized to be appropriated the sum of \$3,000,000, to remain available until expended. The sums appropriated under this section shall be used for making payments to States which have submitted, and had approved by the Surgeon General, State applications for funds for carrying out such purposes.

"STATE APPLICATIONS

"SEC. 612 (a) To be approved, a State application for funds for carrying out the purposes of section 601 (a) must—

"(1) designate a single State agency as the sole agency for carrying out such purposes: *Provided*, That after a State plan has been approved under section 623, any further survey or programming functions shall be carried out, pursuant to section 623 (a) (10), by the agency designated in accordance with section 623 (a) (1);

"(2) provide for the designation of a State advisory council, which shall include representatives of nongovernment organizations or groups, and of State agencies, concerned with the operation, construction, or utilization of hospitals, including representatives of the consumers of hospital services selected from among persons familiar with the need for such services in urban or rural areas, to consult with the State agency in carrying out such purposes;

"(3) provide for making an inventory and survey in accordance with section 601 (a) containing all information required by the Surgeon General, and for developing a program in accordance with section 601 (a) and with regulations prescribed under section 622; and

"(4) provide that the State agency will make such reports, in such form and containing such information, as the Surgeon General may from time to time reasonably require, and give the Surgeon General, upon demand, access to the records on which such reports are based.

"(b) The Surgeon General shall approve any application for funds which complies with the provisions of subsection (a).

"ALLOTMENTS TO STATES

"SEC. 613. (a) Each State for which a State application under section 612 has been approved shall be entitled to an allotment of such proportion of any appropriation made pursuant to section 611 as its population bears to the population of all the

States, and with such allotment it shall be entitled to receive 33 1/3 per centum of its expenditures in carrying out the purposes of section 601 (a) in accordance with its application: *Provided*, That no such allotment to any State shall be less than \$10,000. The Surgeon General shall from time to time estimate the sum to which each State will be entitled under this section, during such ensuing period as he may determine, and shall thereupon certify to the Secretary of the Treasury the amount so estimated, reduced or increased, as the case may be, by any sum by which the Surgeon General finds that his estimate for any prior period was greater or less than the amount to which the State was entitled for such period. The Secretary of the Treasury shall thereupon, prior to audit or settlement by the General Accounting Office, pay to the State, at the time or times fixed by the Surgeon General, the amount so certified.

"(b) Any funds paid to a State under this section and not expended for the purposes for which paid shall be repaid to the Treasury of the United States.

"PART C—CONSTRUCTION OF HOSPITALS AND RELATED FACILITIES

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 621. In order to assist the States in carrying out the purposes of section 601 (b) there is hereby authorized to be appropriated for the fiscal year ending June 30, 1947, and for each of the four succeeding fiscal years, the sum of \$75,000,000 for the construction of public and other nonprofit hospitals; and there are further authorized to be appropriated for such construction the sums provided in section 624. The sums appropriated pursuant to this section shall be used for making payments to States which have submitted, and had approved by the Surgeon General, State plans for carrying out the purposes of section 601 (b); and for making payments to political subdivisions of, and public or other nonprofit agencies in, such States.

"GENERAL REGULATIONS

"SEC. 622. Within six months after the enactment of this title, the Surgeon General, with the approval of the Federal Hospital Council and the Administrator, shall by general regulation prescribe—

"(a) The number of general hospital beds required to provide adequate hospital services to the people residing in a State, and the general method or methods by which such beds shall be distributed among base areas, intermediate areas, and rural areas: *Provided*, That for the purposes of this title, the total of such beds for any State shall not exceed four and one-half per thousand population, except that in States having less than twelve and more than six persons per square mile the limit shall be five beds per thousand population, and in States having six persons or less per square mile the limit shall be five and one-half beds per thousand population; but if, in any area (as defined in the regulations) within the State, there are more beds than required by the standards prescribed by the Surgeon General, the excess over such standards may be eliminated in calculating this maximum allowance.

"(b) The number of beds required to provide adequate hospital services for tuberculous patients, mental patients, and chronic-disease patients in a State, and the general method or methods by which such beds shall be distributed throughout the State: *Provided*, That for the purposes of this title the total number of beds for tuberculous patients shall not exceed two and one-half times the average annual deaths from tuberculosis in the State over the five-year period from 1940 to 1944, inclusive, the total number of beds for mental patients shall not exceed five per thousand population, and the total number of beds for chronic-disease patients shall not exceed two per thousand population.

"(c) The number of public health centers and the general method of distribution of such centers throughout the State, which for the purposes of this title, shall not exceed one per thirty thousand population, except that in States having less than twelve persons per square mile, it shall not exceed one per twenty thousand population.

"(d) The general manner in which the State agency shall determine the priority of projects based on the relative need of different sections of the population and of different areas lacking adequate hospital facilities, giving special consideration to hospitals serving rural communities and areas with relatively small financial resources.

"(e) General standards of construction and equipment for hospitals of different classes and in different types of location.

"(f) That the State plan shall provide for adequate hospital facilities for the people residing in a State without discrimination on account of race, creed, or color, and shall provide for adequate hospital facilities for persons unable to pay therefor. Such regulation may require that before approval of any application for a hospital or addition to a hospital is recommended by a State agency, assurance shall be received by the State from the applicant that (1) such hospital or addition to a hospital will be made available to all persons residing in the territorial area of the applicant, without discrimination on account of race, creed, or color, but an exception shall be made in cases where separate hospital facilities are provided for separate population groups, if the plan makes equitable provision on the basis of need for facilities and services of like quality for each such group; and (2) there will be made available in each such hospital or addition to a hospital a reasonable volume of hospital services to persons unable to pay therefor, but an exception shall be made if such a requirement is not feasible from a financial standpoint.

"(g) General methods of administration of the plan by the designated State agency, subject to the limitations set forth in section 623 (a) (6) and (8).

"STATE PLANS

"SEC. 623. (a) After such regulations have been issued, any State desiring to take advantage of this part may submit a State plan for carrying out the purposes of section 601 (b). Such State plan must—

"(1) designate a single State agency as the sole agency for the administration of the plan, or designate such agency as the sole agency for supervising the administration of the plan;

"(2) contain satisfactory evidence that the State agency designated in accordance with paragraph (1) hereof will have authority to carry out such plan in conformity with this part;

"(3) provide for the designation of a State advisory council which shall include representatives of nongovernment organizations or groups, and of State agencies, concerned with the operation, construction, or utilization of hospitals, including representatives of the consumers of hospital services selected from among persons familiar with the need for such services in urban or rural areas, to consult with the State agency in carrying out such plans;

"(4) set forth a hospital construction program (A) which is based on a State-wide inventory of existing hospitals and survey of need; (B) which conforms with the regulations prescribed by the Surgeon General under section 622 (a), (b), and (c); (C) which, in the case of a State which has developed a program under part B of this title, conforms to the program so developed except for any modification required in order to comply with regulations prescribed pursuant to section 622 (a), (b), and (c), and except for any modification recommended by the State agency designated pursuant to paragraph (1) of this subsection and approved by the Surgeon General; and (D) which meets the requirements as to lack of discrimination on account of race, creed, or color, and for furnishing needed hospital services to persons unable to pay therefor, required by regulations prescribed under section 622 (f);

"(5) set forth the relative need determined in accordance with the regulations prescribed under section 622 (d) for the several projects included in such programs, and provide for the construction, insofar as financial resources available therefor and for maintenance and operation make possible, in the order of such relative need;

"(6) provide such methods of administration of the State plan, including methods relating to the establishment and maintenance of personnel standards on a merit basis (except that the Surgeon General shall exercise no authority with respect to the selection, tenure of office, or compensation of any individual employed in accordance with such methods), as the Surgeon General prescribes by regulation under section 622 (g);

"(7) provide minimum standards (to be fixed in the discretion of the State) for the maintenance and operation of hospitals which receive Federal aid under this part;

"(8) provide for affording to every applicant for a construction project an opportunity for hearing before the State agency;

"(9) provide that the State agency will make such reports in such form and containing such information as the Surgeon General may from time to time reasonably require, and give the Surgeon General, upon demand, access to the records upon which such information is based; and

"(10) provide that the State agency will from time to time review its hospital construction program and submit to the Surgeon General any modifications thereof which it considers necessary.

"(b) The Surgeon General shall approve any State plan and any modification thereof which complies with the provisions of subsection (a). If any such plan or modification thereof shall have been disapproved by the Surgeon General for failure to comply with subsection (a), the Federal Hospital Council shall, upon request of the State agency, afford it an opportunity for hearing. If such Council determines that the plan or modification complies with the provisions of such subsection, the Surgeon General shall thereupon approve such plan or modification.

"(c) No changes in a State plan shall be required within two years after initial approval thereof, or within two years after any change thereafter required therein, by reason of any change in the regulations prescribed pursuant to section 622, except with the consent of the State, or in accordance with further action by the Congress.

"(d) If any State, prior to July 1, 1948, has not enacted legislation providing that compliance with minimum standards of maintenance and operation shall be required in the case of hospitals which shall have received Federal aid under this title, such State shall not be entitled to any further allotments under section 624.

"ALLOTMENTS TO STATES

"SEC. 624. Each State for which a State plan has been approved prior to or during a fiscal year shall be entitled for such year to an allotment of a sum bearing the same ratio to the sums authorized to be appropriated pursuant to section 621 for such year as the product of (a) the population of such State and (b) the square of its allotment percentage (as defined in section 631 (a)) bears to the sum of the corresponding products for all of the States. The amount of the allotment to a State shall be available in accordance with the provisions of this part, for payment of 33 1/3 per centum of the cost of approved projects within such State. The Surgeon General shall calculate the allotments to be made under this section and notify the Secretary of the Treasury of the amounts thereof. Sums allotted to a State for a fiscal year for construction and remaining unobligated at the end of such year shall remain available to such State for such purpose for the next fiscal year (and for such year only), in addition to the sums allotted for such State for such next fiscal year. Any amount of the sum authorized to be appropriated for a fiscal year which is not appropriated for such year, or which is not allotted in such year by reason of the failure of any State or States to have plans approved under this part, and any amount allotted to a State but remaining unobligated at the end of the period for which it is available to such State, is hereby authorized to be appropriated for the next fiscal year in addition to the sum otherwise authorized under section 621.

"APPROVAL OF PROJECTS AND PAYMENTS FOR CONSTRUCTION

"SEC. 625. (a) For each project for construction pursuant to a State plan approved under this part, there shall be submitted to the Surgeon General through the State agency an application by the State or a political subdivision thereof or by a public or other nonprofit agency. Such application shall set forth (1) a description of the site for such project, (2) plans and specifications therefor in accordance with the regulations prescribed by the Surgeon General under section 622 (e), (3) reasonable assurance that title to such site is or will be vested solely in the applicant, (4) reasonable assurance that adequate financial support will be available for the construction of the project and for its maintenance and operation when completed, and (5) reasonable assurance that the rates of pay for laborers and mechanics engaged in construction of the project will be not less than the prevailing local wage rates for similar work as determined in accordance with Public Law 403 of the Seventy-fourth Congress, approved August 30, 1935, as amended. The Surgeon General shall approve such application if sufficient funds to pay 33 1/3 per centum of the cost of construction of such project are available for the allotment to the State, and if the Surgeon General finds (A) that the application contains such reasonable assurance as to title, financial support, and payment of prevailing rates of wages, (B) that the plans and specifications are in accord with the regulations prescribed pursuant to section 622, (C) that the application is in conformity with the State plan approved under section 623 and

contains an assurance that the applicant will conform to the applicable requirements of the State plan and of the regulations prescribed pursuant to section 622 (f) regarding the provision of facilities without discrimination on account of race, creed, or color, and for furnishing needed hospital facilities for persons unable to pay therefor, and an assurance that the applicant will conform to State standards for operation and maintenance, and (D) that it has been approved and recommended by the State agency and is entitled to priority over other projects within the State in accordance with the regulations prescribed pursuant to section 622 (d). No application shall be disapproved until the Surgeon General has afforded the State agency an opportunity for a hearing.

"(b) Upon approving an application under this section, the Surgeon General shall certify to the Secretary of the Treasury an amount equal to 33 1/3 per centum of the estimated cost of construction of the project and designate the appropriation from which it is to be paid. Such certification shall provide for payment to the State, except that if the State is not authorized by law to make payments to the applicant the certification shall provide for payment direct to the applicant. Upon certification by the State agency, based upon inspection by it, that work has been performed upon a project, or purchases have been made, in accordance with the approved plans and specifications, and that payment of an installment is due to the applicant, the Surgeon General shall certify such installment for payment by the Secretary of the Treasury; except that if the Surgeon General, after investigation or otherwise, has ground to believe that a default has occurred requiring action pursuant to section 632 (a) he may, upon giving notice of hearing pursuant to such subsection, withhold certification pending action based on such hearing.

"(c) Amendment of any approved application shall be subject to approval in the same manner as an original application. Certification under subsection (b) may be amended, either upon approval of an amendment of the application or upon revision of the estimated cost of a project. An amended certification may direct that any additional payment be made from the applicable allotment for the fiscal year in which such amended certification is made.

"(d) The funds paid under this section for the construction of an approved project shall be used solely for carrying out such project as so approved.

"(e) If any hospital for which funds have been paid under this section shall, at any time within twenty years after the completion of construction, (A) be sold or transferred to any person, agency, or organization, (1) which is not qualified to file an application under this section, or (2) which is not approved as a transferee by the State agency designated pursuant to section 623 (a) (1), or its successor, or (B) cease to be a nonprofit hospital as defined in section 631 (g), the United States shall be entitled to recover from either the transferor or the transferee (or, in the case of a hospital which has ceased to be a nonprofit hospital, from the owners thereof) 33 1/3 per centum of the then value of such hospital, as determined by agreement of the parties or by action brought in the district court of the United States for the district in which such hospital is situated.

"PART D—MISCELLANEOUS "DEFINITIONS

"SEC. 631. For the purposes of this title—

"(a) the allotment percentage for any State shall be 100 per centum less that percentage which bears the same ratio of 50 per centum as the per capita income of such State bears to the per capita income of the continental United States (excluding Alaska), except that (1) the allotment percentage shall in no case be more than 75 per centum or less than 33 1/3 per centum, and (2) the allotment percentage for Alaska and Hawaii shall be 50 per centum each, and the allotment percentage for Puerto Rico shall be 75 per centum;

"(b) the allotment percentages shall be promulgated by the Surgeon General between July 1 and August 31 of each even-numbered year, on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce. Such promulgation shall be conclusive for each of the two fiscal years in the period beginning July 1 next succeeding such promulgation: *Provided*, That the Surgeon General shall promulgate such percentages as soon as possible after the enactment of this title, which promulgation shall be conclusive for the fiscal year ending June 30, 1947;

"(c) the population of the several States shall be determined on the basis of the latest figures certified by the Department of Commerce;

"(d) the term 'State' includes Alaska, Hawaii, Puerto Rico, and the District of Columbia;

"(e) the term 'hospital' (except as used in section 622 (a) and (b)) includes public health centers and general, tuberculosis, mental, chronic disease, and other types of hospitals, and related facilities, such as laboratories, out-patient departments, nurses' home and training facilities, and central service facilities operated in connection with hospitals, but does not include any hospital furnishing primarily domiciliary care;

"(f) the term 'public health center' means a publicly owned facility for the provision of public health services, including related facilities such as laboratories, clinics, and administrative offices operated in connection with public health centers;

"(g) the term 'nonprofit hospital' means any hospital owned and operated by a corporation or association, no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual;

"(h) the term 'construction' includes construction of new buildings, expansion, remodeling, and alteration of existing buildings, and initial equipment of any such buildings; including architects' fees, but excluding the cost of off-site improvements and, except with respect to public health centers, the cost of the acquisition of land; and

"(i) the term 'cost of construction' means the amount found by the Surgeon General to be necessary for the construction of a project.

"WITHHOLDING OF CERTIFICATION

"SEC. 632. (a) Whenever the Surgeon General, after reasonable notice and opportunity for hearing to the State agency designated in accordance with section 612 (a) (1), finds that the State agency is not complying substantially with the provisions required by section 612 (a) to be contained in its application for funds under Part B, or after reasonable notice and opportunity for hearing to the State agency designated in accordance with section 623 (a) (1) finds (1) that the State agency is not complying substantially with the provisions required by section 623 (a), or by regulations prescribed pursuant to section 622, to be contained in its plan submitted under section 623 (a), or (2) that any funds have been diverted from the purposes for which they have been allotted or paid, or (3) that any assurance given in an application filed under section 625 is not being or cannot be carried out, or (4) that there is a substantial failure to carry out plans and specifications approved by the Surgeon General under section 625, the Surgeon General may forthwith notify the Secretary of the Treasury and the State agency that no further certification will be made under part B or part C, as the case may be, or that no further certification will be made for any project or projects designated by the Surgeon General as being affected by the default, as the Surgeon General may determine to be appropriate under the circumstances; and, except with regard to any project for which the application has already been approved and which is not directly affected by such default, he may withhold further certifications until there is no longer any failure to comply, or, if compliance is impossible, until the State repays or arranges for the repayment of Federal moneys which have been diverted or improperly expended.

"(b) (1) If the Surgeon General refuses to approve any application under section 625, the State agency through which the application was submitted, or if any State is dissatisfied with the Surgeon General's action under subsection (a) of this section, such State may appeal to the United States circuit court of appeals for the circuit in which such State is located. The summons and notice of appeal may be served at any place in the United States. The Surgeon General shall forthwith certify and file in the court the transcript of the proceedings and the record on which he based his action.

"(2) The findings of fact by the Surgeon General, unless substantially contrary to the weight of the evidence, shall be conclusive; but the court, for good cause shown, may remand the case to the Surgeon General to take further evidence, and the Surgeon General may thereupon make new or modified findings of fact and may modify his previous action, and shall certify to the court the transcript and record of the further proceedings. Such new or modified findings of fact shall likewise be conclusive unless substantially contrary to the weight of the evidence.

"(3) The court shall have jurisdiction to affirm the action of the Surgeon General or to set it aside in whole or in part. The judgment of the court shall be subject to review by the Supreme Court of the United States upon certiorari or certification as pro-

vided in sections 239 and 240 of the Judicial Code, as amended.

"FEDERAL HOSPITAL COUNCIL; ADMINISTRATION OF TITLE

"SEC. 633. (a) The Surgeon General is authorized to make such administrative regulations and perform such other functions as he finds necessary to carry out the provisions of this title. Any such regulations shall be subject to the approval of the Administrator.

"(b) In administering this title, the Surgeon General shall consult with a Federal Hospital Council consisting of the Surgeon General, who shall serve as Chairman ex officio, and eight members appointed by the Administrator. Four of the eight appointed members shall be persons who are outstanding in fields pertaining to hospital and health activities, three of whom shall be authorities in matters relating to the operation of hospitals, and the other four members shall be appointed to represent the consumers of hospital services and shall be persons familiar with the need for hospital services in urban or rural areas. Each appointed member shall hold office for a term of four years, except that any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and the terms of office of the members first taking office shall expire, as designated by the Administrator at the time of appointment, two at the end of the first year, two at the end of the second year, two at the end of the third year, and two at the end of the fourth year after the date of appointment. An appointed member shall not be eligible to serve continuously for more than two terms but shall be eligible for reappointment if he has not served immediately preceding his reappointment. The Council is authorized to appoint such special advisory and technical committees as may be useful in carrying out its functions. Appointed Council members and members of advisory or technical committees, while serving on business of the Council, shall receive compensation at rates fixed by the Administrator, but not exceeding \$25 per day, and shall also be entitled to receive an allowance for actual and necessary travel and subsistence expenses while so serving away from their places of residence. The Council shall meet as frequently as the Surgeon General deems necessary, but not less than once each year. Upon request by three or more members, it shall be the duty of the Surgeon General to call a meeting of the Council.

"(c) In administering the provisions of this title, the Surgeon General, with the approval of the Administrator, is authorized to

utilize the services and facilities of any executive department in accordance with an agreement with the head thereof. Payment for such services and facilities shall be made in advance or by way of reimbursement, as may be agreed upon between the Administrator and the head of the executive department furnishing them.

"CONFERENCES OF STATE AGENCIES

"SEC. 634. Whenever in his opinion the purposes of this title would be promoted by a conference, the Surgeon General may invite representatives of as many State agencies, designated in accordance with section 612 (a) (1) or section 623 (a) (1), to confer as he deems necessary or proper. Upon the application of five or more of such State agencies, it shall be the duty of the Surgeon General to call a conference of representatives of all State agencies joining in the request. A conference of the representatives of all such State agencies shall be called annually by the Surgeon General.

"STATE CONTROL OF OPERATIONS

"SEC. 635. Except as otherwise specifically provided, nothing in this title shall be construed as conferring on any Federal officer or employee the right to exercise any supervision or control over the administration, personnel, maintenance, or operation of any hospital with respect to which any funds have been or may be expended under this title."

SEC. 3. Paragraph (2) of section 208 (b) of the Public Health Service Act, as amended, is amended by inserting "(A)" before the words "to assist"; by striking out the word "paragraph" and inserting in lieu thereof the word "clause"; and by striking out the period at the end of such paragraph and inserting in lieu thereof a comma and the following: "and (B) to assist in carrying out the purposes of title VI of this Act, but not more than twenty such officers appointed pursuant to this clause shall hold office at the same time."

SEC. 4. Section 1 of the Public Health Service Act is amended to read:

"Section 1. Titles I to VI, inclusive, of this Act may be cited as the 'Public Health Service Act'."

SEC. 5. The Act of July 1, 1944 (58 Stat. 682), is hereby further amended by changing the number of title VI to title VII and by changing the numbers of sections 601 to 612, inclusive, and references thereto, to sections 701 to 712, respectively.

Approved August 13, 1946.

AMENDMENTS TO PUBLIC LAW 725—79th CONGRESS

PUBLIC LAW 713—80th CONGRESS

CHAPTER 544—2D SESSION

(H.R. 5889)

AN ACT

To extend the provisions of title VI of the Public Health Service Act to the Virgin Islands.

Be it enacted by the Senate and House Representatives of the United States of America in Congress assembled, That (a) paragraph (a) of section 631 of the Public Health Service Act, as

amended, is amended by inserting after "Puerto Rico" the following: "and the Virgin Islands."

(b) Paragraph (d) of such section is amended to read as follows:

"(d) the term 'State' includes Alaska, Hawaii, Puerto Rico, the Virgin Islands, and the District of Columbia;"

Approved June 19, 1948.

PUBLIC LAW 723—80th CONGRESS

CHAPTER 554—2D SESSION

(H.R. 6339)

AN ACT

To amend the provisions of title VI of the Public Health Service Act relating to standards of maintenance and operation for hospitals receiving aid under that title.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection (d) of section 623 of the Public Health Service Act, as amended, is amended to read:

"(d) If any State, prior to July 1, 1948, has not enacted legislation providing that compliance with minimum standards of maintenance and operation shall be required prior to that date (or, at the option of the State, required within such time after

enactment of the legislation as the Surgeon General finds reasonable) in the case of hospitals which shall have received Federal aid under this title, such State shall not be entitled to any further allotments under section 624 until such time as such State has enacted such legislation. Upon enactment of such legislation after July 1, 1948, the prohibition in this subsection against further allotments to such State under this part shall no longer be effective and such State shall, subject to the other requirements of this part, be entitled to allotments under section 624 for the fiscal year in which such legislation is enacted and for the preceding fiscal year."

Approved June 19, 1948.

PUBLIC LAW 830—80th CONGRESS
CHAPTER 728—2D SESSION
(H.R. 4816)

AN ACT

To amend section 624 of the Public Health Service Act so as to provide a minimum allotment of \$100,000 to each State for the construction of hospitals.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the first sentence of section 624 of the Public Health Service Act, as amended, is amended to read as follows: "Each State for which a State plan has been approved prior to or during a fiscal year shall be entitled for such year to an allotment of a sum bearing the same ratio to the sums authorized to be appropriated pursuant to section 621 for such year as the product of (a) the population of such

State and (b) the square of its allotment percentage (as defined in section 61 (a)) bears to the sum of the corresponding products for all of the States: *Provided*, That no such allotment to any State shall be less than \$100,000 but for the purpose of this proviso the term State shall not include the Virgin Islands."

SEC. 2. There are hereby authorized to be appropriated for the fiscal year ending June 30, 1948, and for each of the three succeeding fiscal years, such sums as may be necessary to provide increased allotments for the construction of hospitals pursuant to the first sentence of section 624 of the Public Health Service Act, as amended by the first section of this Act.

Approved June 29, 1948.

APPENDIX B

UNITED STATES PUBLIC HEALTH SERVICE REGULATIONS¹

TITLE 42—PUBLIC HEALTH Chapter I—Public Health Service,

Federal Security Agency

PART 53—GRANTS FOR SURVEY, PLANNING AND CONSTRUCTION OF HOSPITALS

SUBPART A—DEFINITIONS

Sec.

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53.78 Requests for construction payments.

53.79 Fiscal and accounting requirements.

Appendix A—General standards of construction and equipment.
Appendix B—Merit System Policies of the United States Public Health Service.

AUTHORITY: §§ 53.1 to 53.79, inclusive, issued under sec. 622, Pub. Law 725, 79th Cong., 60 Stat. 1042; 42 U. S. C. Supp. 291e.

DERIVATION: §§ 53.1 to 53.79, inclusive, contained in Regulations, Acting Surgeon General, Jan. 24, 1947, approved Federal Hospital Council, Nov. 14, 1946, and Federal Security Administrator, Feb. 4, 1947, as amended by Regulations, Surgeon General, approved Federal Hospital Council and Federal Security Administrator, June 5, 1947, 12 F. R. 980, 3308.

SUBPART A—DEFINITIONS

§ 53.1 *Definitions.* Except as otherwise stated, the following terms shall have the following meanings when used in the regulations in this part:

(a) *Area.* A logical hospital service area, taking into account such factors as population, distribution, natural geographic boundaries, transportation, and trade patterns, all parts of which are reasonably accessible to existing or proposed hospital facilities and which has been designated by the State Agency as a base, intermediate, or rural area. Nothing in the regulations in this part shall preclude the formation of an interstate area with the mutual agreement of the States concerned.

(b) *Base area.* Any area which is so designated by the State Agency and has the following characteristics: (1) Irrespective of the population of the area, it shall contain a teaching hospital of a medical school; this hospital must be suitable for use as a base hospital in a coordinated hospital system within the State; or (2) the area has a total population of at least 100,000 and contains or will contain on completion of the hospital construction program under the State plan at least one general hospital which has a complement of 200 or more beds for general use. This hospital must furnish internships and residencies in two or more specialties and must be suitable for use as a base hospital in a coordinated hospital system within the State.

(c) *Intermediate area.* Any area so designated by the State Agency which: (1) Has a total population of at least 25,000 and (2) contains, or will contain on completion of the hospital construction program under the State plan, at least one general hospital which has a complement of 100 or more beds and which would be suitable for use as a district hospital in a coordinated hospital system within the State.

(d) *Rural area.* Any area so designated by the State Agency which constitutes a unit, no part of which has been included in a base or intermediate area.

(e) *Coordinated hospital system.* An interrelated network of general hospitals throughout a State in which one or more base hospitals provide district hospitals and the latter in turn provide rural and other small hospitals with such services relative to diagnosis, treatment, medical research and teaching as cannot be provided by the smaller hospitals individually.

(f) *Hospital.* Public health centers and general, tuberculosis, mental, chronic disease, and other types of hospitals, and related

¹Reprint from *Federal Register*, October 22, 1947.

facilities, such as laboratories, out-patient departments, nurses' home and training facilities, and central service facilities operated in connection with hospitals, but not institutions furnishing primarily domiciliary care. The term "hospital," except as applied generally to include public health centers, shall be restricted to institutions providing community service for in-patient medical or surgical care of the sick or injured; this includes obstetrics. It shall exclude Federal hospitals and institutions found to constitute a public hazard.

(g) *Allied special hospital.* Cardiac, eye-ear-nose-throat, isolation, maternity, children's orthopedic, and skin and cancer, as well as other hospitals providing similar specialized types of care commonly given in general hospitals. The term excludes mental, tuberculosis, and chronic disease hospitals.

(h) *Chronic disease hospital.* A hospital, the primary purpose of which is medical treatment of chronic illness, including the degenerative diseases, and which furnishes hospital treatment and care, administered by or under the direction of persons licensed to practice medicine in the State. The term includes such convalescent homes as meet the foregoing qualifications. It excludes tuberculosis and mental hospitals, nursing homes, and also institutions, the primary purpose of which is domiciliary care.

(i) *General hospital.* Any hospital for in-patient medical or surgical care of acute illness or injury and for obstetrics, of which not more than 50% of the total patient days during the year are customarily assignable to the following categories of cases: Chronic, convalescent and rest, drug and alcoholic, epileptic, mentally deficient, mental, nervous and mental, and tuberculosis.

(j) *Mental hospital.* A hospital for the diagnosis and treatment of nervous and mental illness but excluding institutions for the feeble-minded and epileptics.

(k) *Nonprofit hospital.* Any hospital owned and operated by a corporation or association, no part of the net earnings of which is applied, or may lawfully be applied, to the benefit of any private shareholder or individual.

(l) *Psychiatric hospital.* A type of mental hospital where patients may receive intensive treatment and where only a minimum of continued treatment facilities will be afforded.

(m) *Tuberculosis hospital.* A hospital for the diagnosis and treatment of tuberculosis, excluding preventoria.

(n) *Hospital bed.* A bed for an adult or child patient. Bassinets for the new-born in a nursery, beds in labor rooms and in health centers, and other beds used exclusively for emergency purposes are not included in this definition.

(o) *Population.* In computing the population of the State or any area thereof for purposes of the regulations in this part, the State Agency shall use the latest figures of civilian population certified by the Federal Department of Commerce with such adjustments as may be necessary to reflect changing local conditions. Such adjustments shall not result in any increase in the total population of the State over the figures certified by the Department of Commerce.

(p) *Public health center.* A publicly owned facility utilized by a local health unit for the provision of public health services, including related facilities such as laboratories, clinics, and administrative offices operated in connection with public health centers.

(q) *Local health unit.* A single county, city, county-city, or local district health unit, as well as a State health district unit where the primary function of the State district unit is the direct provision of public health services to the population under its jurisdiction.

(r) *Public health services.* Services provided through organized community effort in the endeavor to prevent disease, prolong life, and maintain a high degree of physical and mental efficiency. In addition to the services which the community already provides as a matter of practice, the term shall include such additional services as the community from time to time may deem it desirable to provide.

(s) *State.* The 48 States, Alaska, Hawaii, Puerto Rico, and the District of Columbia.

(t) *State agency.* As the context may require, either the agency designated by the State pursuant to section 612 (a) (1) of the Federal Hospital Survey and Construction Act or the agency designated to administer the State plan pursuant to section 623 (a) (1) of the Federal Act.

(u) *Surgeon General.* The Surgeon General of the United States Public Health Service.

(v) *Federal Act.* Title VI of the Public Health Service Act, as amended by the Hospital Survey and Construction Act (Public Law 725, 79th Congress, 60 Stat. 1042; 42 U. S. C. Supp. 291 (e)), approved August 13, 1946.

SUBPART B—DISTRIBUTION OF GENERAL HOSPITAL BEDS

§ 53.11 *Plan of distribution.* It is the intention of the regula-

tions in this part to provide for distribution of general hospital beds among the different areas of the State so as to provide comprehensive and adequate types of hospital services to all sizes of communities. In accordance with this intent the general methods by which general hospital beds shall be distributed among base areas, intermediate areas, and rural areas, shall be as provided for in §§ 53.12 to 53.14, inclusive.

§ 53.12 *Maximum State allowance.* The number of general hospital beds required to provide adequate hospital services to the people residing in any State shall be:

(a) In States having 12 or more persons per square mile, 4.5 beds per thousand population,

(b) In States having less than 12 and more than 6 persons per square mile, 5 beds per thousand population; and

(c) In States having 6 persons or less per square mile, 5.5 beds per thousand population.

If in any area (base, intermediate, or rural), as determined by the State agency, there are more beds than required by these standards, such excess may be eliminated in calculating the maximum allowance for the State as a whole.

§ 53.13 *Standards for construction program.* The construction program under the State plan shall provide for general hospital beds, existing and proposed, in each area within the State in accordance with the following standards:

(a) In States having 12 or more persons per square mile, 2.5 beds per thousand population in rural areas, 4.0 beds per thousand in intermediate areas, and 4.5 beds per thousand in base areas;

(b) In States having less than 12 but more than 6 persons per square mile, 3 beds per thousand population in rural areas, 4.5 beds per thousand in intermediate areas, and 5 beds per thousand in base areas; and

(c) In States having 6 or less persons per square mile, 3.5 beds per thousand population in rural areas, 5.0 beds per thousand in intermediate areas, and 5.5 beds per thousand in base areas.

In addition, the State agency shall subtract from the total number of beds permitted for each area under § 53.12 the total number of beds in existence, whichever is greater. The total number of beds so determined for all areas shall be distributed at the discretion of the State agency and without regard to standards specified in §§ 53.12 and 53.13. This shall be done in such a manner as to meet the special needs of any area and facilitate the coordination of hospital services. In allocating beds under this section, the State Agency shall give special consideration to hospitals serving persons in rural areas and communities with relatively small financial resources.

§ 53.14 *Beds classified as general hospital beds.* The count of existing general hospital beds shall include the beds in the hospitals of this category as defined above, and also: (a) Beds in allied special hospitals, and (b) beds in any tuberculosis, mental, or chronic disease hospital which are specifically assigned for the care of general patients, except where the beds so assigned in any institution number less than ten. Beds for persons hospitalized for the primary condition of tuberculosis, mental, or chronic disease shall be excluded.

SUBPART C—DISTRIBUTION OF TUBERCULOSIS, MENTAL, AND CHRONIC DISEASE HOSPITAL BEDS

§ 53.21 *Maximum State allowance.* The number of beds required to provide adequate hospital services for tuberculous patients, mental patients, and chronic disease patients in any State shall be:

(a) For tuberculous patients, 2.5 times the average annual deaths from tuberculosis in the State over the 5-year period from 1940 to 1944, inclusive;

(b) For mental patients, 5 per thousand population; and

(c) For chronic disease patients, 2 per thousand population.

The count of existing tuberculosis, mental, and chronic disease hospital beds shall include the beds in the hospitals of these respective categories, as defined above, and also beds in any general hospital which are specifically assigned for the care of tuberculous, mental and chronic disease patients respectively, except where the beds so assigned in any institution number less than 10 in any category.

§ 53.22 *Distribution.* Whenever practicable, tuberculosis hospitals receiving grants under the Federal Act shall be built in centers of population and in proximity to general hospitals.

Whenever practicable, mental hospitals receiving grants under the Federal Act shall be located in centers of population and in proximity to general hospitals.

Whenever practicable, chronic disease hospitals shall be built in centers of population and in proximity to general hospitals.

SUBPART D—DISTRIBUTION OF PUBLIC HEALTH CENTERS

§ 53.31 *Maximum State allowance.* The number of public health centers in a State (counting those existing as well as those provided with aid under the act) shall not exceed one per 30,000 State population, except in States having less than 12 persons per square mile the number shall not exceed one per 20,000 population. The following shall be excluded from the count of public health centers:

(a) Existing facilities which the State Agency, after consultation with the State health authority, has determined to be unsuitable for use as public health centers, and

(b) Auxiliary facilities such as laboratories and clinics, whether existing or proposed, and whether they are located within the same structure as the health department office, or in a separate structure.

§ 53.32 *Distribution.* The general method of distribution of public health centers throughout the State shall conform to the plan of organization of local health units within the State. In instances where the State Health Department is not the State Agency designated under section 623 (a) (1) of the Federal Act, the method of distribution shall be determined after consultation with the State health authority.

SUBPART E—PRIORITY OF PROJECTS

§ 53.41 *Manner of determination.* The general manner in which the State Agency shall determine the priority of projects included in the State construction program shall conform with the principles set out in this subpart.

§ 53.42 *Balance among categories of facilities.* Insofar as practicable the State Agency shall develop its construction program in relation to the proportionate need for each of the five categories of facilities (general, mental, tuberculosis, chronic, and health centers). In determining proportionate needs, consideration shall be given to existing facilities and those under construction without assistance under the Federal act.

§ 53.43 *All categories of facilities; additional facilities as against replacements.* Initial installations and additions to existing hospitals and health centers shall be given priority over replacements, except:

(a) Where replacement is of minor character and necessary to the provision of needed additional facilities;

(b) Where, in the case of a hospital, replacement is essential to eliminate an existing needed hospital which constitutes a public hazard;

(c) Where, in the case of a public health center, the State health authority has certified that the existing facility is unsuitable for use as a public health center.

§ 53.44 *General hospital category.* The relative priority of these projects shall be determined after consideration of the following factors in the order of importance as given:

(a) The relative need for beds in the area (base, intermediate, or rural) in which the project will be located, taking into account the utilization of existing general hospital beds in the area and giving special consideration to projects providing service for persons located in rural communities and areas with relatively small financial resources;

(b) The extent to which beds will be made available for groups of the population which by reason of race, creed, or color are less adequately served than other groups of the population.

§ 53.45 *Chronic diseases category.* Priority shall be given to those projects in which the chronic disease facilities will be operated as sub-units of general hospitals.

§ 53.46 *Public health centers.* Highest priority in this category shall be given to the provision of facilities for local health units serving rural communities and areas with relatively small financial resources. Where the agency designated to administer the State plan is not the State health authority, the State Agency shall determine the relative priorities to be established after consultation with the State health authority.

§ 53.47 *Size and character.* Insofar as practicable and without affecting the priority of hospitals serving rural communities and areas with relatively small financial resources, special consideration shall be given to applications for construction of projects of a size and character consistent with efficient and economical operation.

SUBPART F—GENERAL STANDARDS OF CONSTRUCTION AND EQUIPMENT

§ 53.51 *General.* Plans and specifications for each project submitted to the Surgeon General for approval under the Federal Act shall be prepared in accordance with the "General Standards of Construction and Equipment" for hospitals of different classes and in different types of locations as prescribed by the Surgeon General set forth in Appendix A¹ to this part. The Surgeon General may approve plans and specifications which contain deviations

from the requirements prescribed, if he is satisfied that the purposes of such requirements have been fulfilled.

The design and construction covered by the plans and specifications must conform with the applicable State and local laws, codes, and ordinances and with the approved State plan. The plans and specifications must be complete and adequate for contract purposes and have the approval and recommendation of the State Agency.

Equipment shall be provided in the kind and to the extent necessary for the proper functioning of the facility as planned.

§ 53.52 *Size of mental and psychiatric hospitals.* No application for construction of a psychiatric hospital with a capacity of more than 500 beds or of a mental hospital with a capacity of more than 3,000 beds shall be approved. This requirement shall not be construed to prevent approval of applications for improvements of psychiatric and mental hospitals with bed capacities equal to or greater than those specified above, if such improvements are designed to provide more intensive treatment facilities within such hospitals.

§ 53.53 *Size of tuberculosis hospitals.* No application for construction of a tuberculosis hospital with a capacity of less than 100 beds shall be approved, except that an application for construction of a tuberculosis hospital with a capacity from 50 to 100 beds may be approved where necessary to provide facilities for an isolated area too small to support a larger hospital.

SUBPART G—NON-DISCRIMINATION AND HOSPITAL SERVICES FOR PERSONS UNABLE TO PAY THEREFOR

§ 53.61 *General.* The State plan shall provide for adequate hospital facilities for the people residing in a State without discrimination on account of race, creed, or color and shall provide for adequate hospital facilities for persons unable to pay therefor.

§ 53.62 *Non-discrimination.* Before a construction application is recommended by a State Agency for approval, the State Agency shall obtain assurance from the applicant that the facilities to be built with aid under the act will be made available without discrimination on account of race, creed, or color to all persons residing in the area to be served by that hospital. However, in any area where separate hospital facilities are provided for separate population groups, the State Agency may waive the requirement of assurance from the construction applicant if (a) it finds that the plan otherwise makes equitable provision on the basis of need for facilities and services of like quality for each such population group in the area, and (b) such finding is subsequently approved by the Surgeon General. Facilities provided under the Federal Act will be considered as making equitable provision for separate population groups when the facilities to be built for the group less well provided for heretofore are equal to the proportion of such group in the total population of the area, except that the State plan shall not program facilities for a separate population group for construction beyond the level of adequacy for such group.

§ 53.63 *Hospital services for persons unable to pay therefor.* Before a construction application is recommended by a State Agency for approval, the State Agency shall obtain assurance that the applicant will furnish a reasonable volume of free patient care. As used in this section, "free patient care" means hospital service offered below cost or free to persons unable to pay therefor, including under "persons unable to pay therefor," both the legally indigent and persons who are otherwise self-supporting but are unable to pay the full cost of needed hospital care. Such care may be paid for wholly or partly out of public funds or contributions of individuals and private and charitable organizations such as community chests or may be contributed at the expense of the hospital itself. In determining what constitutes a reasonable volume of free patient care, there shall be considered conditions in the area to be served by the applicant, including the amount of free care that may be available otherwise than through the applicant. The requirement of assurance from the applicant may be waived if the applicant demonstrates to the satisfaction of the State Agency, subject to subsequent approval by the Surgeon General, that furnishing such free patient care is not feasible financially.

SUBPART H—METHODS OF ADMINISTRATION OF THE STATE PLAN

§ 53.71 *General.* The State plan shall provide for general methods of administration which are in accord with the principles set out in §§ 53.72 to 53.78, inclusive.

§ 53.72 *Construction program.* The State hospital construction program shall be developed in the following manner:

(a) The State Agency shall determine need for hospital facilities of all types and health center facilities by applying the ratios heretofore specified and deducting existing facilities, except those justifying replacement under priority regulations.

¹Not included herein.

(b) The State Agency shall determine through field investigation, and otherwise, the approximate locations within each area at which needed beds or health centers should most appropriately be built.

(c) After having determined hospital and public health center needs, the State Agency shall establish an overall construction program. This program shall set forth all such needs in accordance with the standards specified in §§ 53.12, 53.21, and 53.31 and shall show the relative need for each project included, irrespective of the availability of funds for construction and for maintenance and operation.

(d) The State Agency shall, from time to time as necessary, but at least annually, review the overall hospital construction program. Annually, at a time fixed by the Surgeon General, the Agency shall submit to him a report, which shall contain such revisions of the construction program, as the Agency considers necessary.

(e) The State Agency shall establish a separate construction schedule on such forms and for such periods as the Surgeon General may prescribe. Insofar as funds are available for construction and for maintenance and operation, construction shall be scheduled in the order of relative need.

§ 53.73 *Personnel administration.* A system of personnel administration on a merit basis shall be established and maintained with respect to the personnel employed in the administration of the State plan. Such a system shall include provision for:

- (a) Impartial administration of the merit system;
- (b) Operation on the basis of published rules or regulations;
- (c) Classification of all positions on the basis of duties and responsibilities and establishment of qualifications necessary for the satisfactory performance of such duties and responsibilities;
- (d) Establishment of compensation schedules adjusted to the responsibility and difficulty of the work;
- (e) Selection of permanent appointees on the basis of examinations so constructed as to provide a genuine test of qualifications and so conducted as to afford all qualified applicants opportunity to compete;
- (f) Advancement on the basis of capacity and meritorious service; and
- (g) Tenure of permanent employees.

Substantial compliance with the merit system policies of the Public Health Service as set forth in Appendix B¹ will be deemed to meet the requirements of the regulations in this part.

§ 53.74 *Fair hearings.* The State Agency shall establish such rules and regulations as will provide an opportunity for an appeal to and a fair hearing before the State Agency to every applicant for a construction project who is dissatisfied with any action of the State Agency regarding its application.

§ 53.75 *Construction standards.* The State Agency shall adopt general standards of construction and equipment for the various types of hospitals and health centers assisted under this program. The standards adopted shall not be less than the general standards prescribed by the Surgeon General and set forth in Appendix A to this part.

§ 53.76 *Publicizing the State plan.* (a) Prior to submission of the State plan to the Surgeon General, the State Agency shall publish a general description of the provisions proposed to be included in the State plan and shall give reasonable notice of a public hearing at which all interested persons or organizations will be given an opportunity to be heard.

(b) After the Surgeon General has approved the State plan, the State Agency shall publish a general description of its provisions in newspapers having general circulation throughout the State and shall make the approved State plan available for examination, upon request, to all interested persons or organizations.

§ 53.77 *Processing construction applications—(a) Form of application.* Construction applications, including a detailed estimate of the cost of the project, shall be submitted to the Surgeon General through the State Agency and shall be executed on forms prescribed by the Surgeon General.

(b) *Order of processing applications.* The State Agency shall process applications received in the order of priority, except that the State Agency may approve, recommend and forward to the Surgeon General applications out of the order of priority if:

(1) The State Agency has afforded reasonable opportunity for development and presentation of projects in the order of priority, and

(2) If the State Agency certifies to the Surgeon General that financial resources for the construction, maintenance and operation of projects of higher priority are not then available.

The priority of a project under the State plan shall not be affected by the fact that other projects of lower priority have

previously been approved and recommended by the State Agency.

(c) *Assurances from applicant.* In addition to assurance otherwise required by the State Agency, before approving an application, the State Agency must have assurance from the applicant:

(1) That actual construction work will be performed by the lump sum (fixed price) contract method, that adequate methods of obtaining competitive bidding will be or have been employed prior to awarding the construction contract, either by public advertising or circularizing three or more bidders, and that the award of the contract will be or has been made to the responsible bidder submitting the lowest acceptable bid;

(2) That the construction contracts will prescribe the minimum rates of pay for laborers and mechanics engaged in construction of the project as determined by the Secretary of Labor and that such minimum rates will be stated in the specifications advertised in the call for bids on the proposed project;

(3) That the requirement that each contractor or subcontractor shall furnish a weekly sworn affidavit with respect to the wages paid each employee during the preceding week, as required by 48 Stat. 948 (40 U. S. C. 276 (b) and 276 (c)), and the regulations issued pursuant thereto, will be incorporated in the project specifications and made a part of the construction contract;

(4) That the project will not be advertised or placed on the market for bidding until the final working drawings and specifications have been approved by the Surgeon General and the applicant has been so notified;

(5) That no construction contract or contracts for the project or a part thereof, the cost of which is in excess of the estimated cost approved in the application for that portion of the work covered by the plans and specifications, will be entered into without the prior approval of the Surgeon General;

(6) That the construction contract will require the contractor to furnish performance and payment bonds, the amount of which shall each be in an amount not less than fifty per centum (50%) of the contract price, and to maintain during the life of the contract adequate fire, workmen's compensation, public liability and property damage insurance;

(7) That any change or changes in the contract which (i) makes any major alteration in the work required by the plans and specifications, or (ii) raises the total contract price over the approved estimate of cost of the work covered by the plans and specifications will be submitted to the Surgeon General for prior approval;

(8) That the construction contract will provide that the Surgeon General, the State Agency and their representatives will have access at all times to the work wherever it is in preparation or progress and that the contractor will provide proper facilities for such access and inspection;

(9) That the applicant will provide and maintain competent and adequate architectural or engineering supervision and inspection at the project to insure that the completed work conforms with the approved plans and specifications; and

(10) That the hospital, when completed, will be operated and maintained in accordance with minimum standards prescribed by the State Agency for the maintenance and operation of hospitals aided under the Federal act.

Provided: That the State Agency, with the prior approval of the Surgeon General, may waive technical compliance with any of the requirements of this paragraph except subparagraph (1) if it finds that the purpose of such requirement has been fulfilled.

(d) *Certification to the Surgeon General.* After the State Agency has approved a construction application, it shall recommend it to the Surgeon General for approval and shall certify:

(1) That the application contains reasonable assurance as to title, payment of prevailing rates of wages, and financial support for the non-Federal share of the cost of construction and the entire cost of maintenance and operation when completed;

(i) Availability of funds for the non-Federal share of construction costs shall mean (a) funds immediately available, placed in escrow, or acceptably pledged, or (b) funds or fund sources specifically earmarked in a sum sufficient for that purpose or (c) other assurances acceptable to the Surgeon General.

(ii) To assure the availability of funds for maintenance and operation, the application for the construction of a new project must include a proposed operating budget, on a form prescribed by the Surgeon General, for the two year period immediately following its completion. In the case of an addition to an existing facility, the application must include a statement showing that funds are or will be available to meet the difference between proposed expenditures and anticipated income from the operation of the constructed addition for the two year period immediately following its completion.

¹Not included herein.

(2) That the plans and specifications are in accord with Appendix A;

(3) That the application is in conformity with the State plan approved by the Surgeon General and contains an assurance that the applicant will conform to the applicable requirements of the plan;

(4) That the application contains an assurance that the applicant will conform to the requirements of § 53.61, 53.62, and 53.63 regarding the provision of facilities without discrimination on account of race, creed, or color, and for furnishing needed hospital facilities for persons unable to pay therefor;

(5) That the application contains an assurance that the applicant will conform to State standards for operation and maintenance and to all applicable State laws and State and local codes, regulations, and ordinances;

(6) That the application is entitled to priority over other projects within the State and that in making this determination the State agency has complied with paragraph (b) of this section; and

(7) That the State Agency has approved the application.

(e) *Amendments to application.* An amendment to any application approved by the Surgeon General shall be processed in the same manner as an original application, except that the original application's conformity with priority regulations shall suffice for the amendment. Minor changes not provided for under paragraph (c) (7) of this section are not considered amendments.

§ 53.78 *Requests for construction payments*—(a) *Certification by State Agency.* The State Agency shall certify to the Surgeon General the amount of payments due to an applicant for the cost of work performed and materials and equipment furnished.

Requests for payment under the construction contract shall be submitted in each of three stages, as follows:

(1) The first installment when not less than 25 percent of the work of construction of the building has been completed,

(2) The second installment when the mechanical work has been substantially roughed in, and

(3) The third installment when work under the construction contract is completed and final inspection made.

Requests for payment of the Federal share of other allowable costs such as architect's fee, inspection cost, and cost of equipment shall be included in requests for payments made at one or more of the stages indicated in this paragraph.

All costs that have not been determined at the time the third payment for work performed under the construction contract is requested shall form the basis of a request for final payment of the Federal share of the entire project.

With the consent of the Surgeon General, the State Agency may adopt a different schedule of payments, but in no case shall

such payments be less frequent than those scheduled in this paragraph.

(h) *Inspection by State Agency.* As a basis for certification by the State Agency that payment of an installment is due an applicant, the State Agency, without expense to the Federal government, shall make adequate inspections to determine that the work has been performed upon a project, or purchases have been made, in accordance with the approved plans and specifications.

§ 53.79 *Fiscal accounting requirements*—(a) *Construction allotments.* The State Agency shall be responsible for establishing and maintaining accounts and fiscal controls of all Federal and State funds allotted for construction projects. Federal and State funds shall be separately identified by maintaining separate fund accounts for this purpose.

The fiscal records shall be so designed as to show at any given time the Federal funds allotted, encumbered, and unencumbered balances. If State contributions are made for construction, separate accounts, reflecting similar information, shall be maintained for State funds.

(b) *Construction payments.* Where the State may receive Federal funds for applicants for construction project grants, or the State itself is an applicant, adequate records of account and fiscal controls shall be established and maintained by the State to assure proper accounting of all funds received and disbursed. Similar suitable accounts shall be maintained to show the receipt and disbursement of State, local or other funds used for matching purposes.

The State Agency shall require that applicants receiving Federal funds establish and maintain adequate accounting and fiscal records to reflect the receipt and expenditure of funds allotted and paid for construction projects. Separate accounts by source shall be maintained of all funds received for construction projects. These records shall be maintained regardless of whether Federal funds are received through the State Agency or directly from the Federal government.

The States which by law are authorized to make payments to applicants shall promptly pay such applicants funds certified for payment by the Surgeon General for approved construction projects.

[SEAL]

THOMAS PARRAN,
Surgeon General.

Approved:

THOMAS PARRAN,
Chairman,
Federal Hospital Council.

Approved: October 17, 1947.

OSCAR R. EWING,
Federal Security Administrator.

APPENDIX C

CHAPTER 810

LAWS OF MARYLAND, 1947

AN ACT to add two new sections to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", sub-title "Hospitals", said new sections to be known as Section 496L and 496M, and to follow immediately after Section 496K of said Article, as said section was enacted by Chapter 210 of the Acts of 1945, designating the State Board of Health as the sole agency to represent the State for the purpose of Part C, Public Law 725 of the 79th Congress of the United States authorizing grants to States for construction and reconstruction of hospitals and health centers, and creating an Advisory Council on Hospital Construction to advise in connection therewith.

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That two new sections be and they are hereby added to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", sub-title "Hospitals", said new sections to be known as Sections 496L and 496M to follow immediately after Section 496K of said Article, as said Section was enacted by Chapter 210 of the Acts of 1945, and to read as follows:

496L. The State Board of Health is hereby designated as the sole agency to represent the State of Maryland for the purposes of Part C, Title VI of the Public Health Service Act, as enacted by Public Law 725 of the 79th Congress of the United States, and all

amendments thereof and additions thereto, providing grants to States for the construction and reconstruction of hospitals and related facilities. There is hereby conferred upon the State Board of Health the powers necessary for it to comply with the provisions relating to the sole State agency representing the State of Maryland for the purposes stated in Part C of said Public Law 725 and all amendments thereof and additions thereto, and contained in any part of said Title VI of Public Law 725 and all amendments thereof and additions thereto.

496M. The Governor shall appoint eleven persons to an Advisory Council on Hospital Construction to consult with and advise the State Board of Health in its administration of a State plan for the construction and reconstruction of hospital facilities as provided for in said Public Law 725 of the 79th Congress of the United States.

The term of office of the appointed members of the Advisory Council on Hospital Construction shall be three years, but of those first appointed, three shall be appointed for a term of one year, four for a term of two years, and four for a term of three years, and, on the expiration of their respective terms, their successors shall be appointed for a term of three years.

Three members of said Advisory Council on Hospital Construction shall be appointed from a list of names submitted by the

Medical and Chirurgical Faculty of Maryland; four members shall be appointed from a list of names submitted by the Maryland-District of Columbia Hospital Association, at least two of whom shall be physicians; one member shall be a member of the faculty of a graduate school of Public Health in the State of Maryland; and three members shall be representatives of consumers of hospital services selected from among persons familiar with the need for such services in urban and rural areas.

In addition to the members so appointed, the persons holding the following positions shall also serve as members of said Advisory Council on Hospital Construction: the Director of the Department of Health of Maryland; the Commissioner of Mental Hygiene of Maryland; two members of the Committee on Medical Care of the Maryland State Planning Commission, designated by

said Commission; and the Commissioner of Health of Baltimore City.

SEC. 2. (Severability.) If any provision of this Act, or the application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the provisions or applications of this Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are declared to be severable.

SEC. 3. (Repeal.) All Acts, or parts of Acts, which are inconsistent with the provisions of this Act are hereby repealed.

SEC. 4. *And be it further enacted*, That this Act shall take effect June 1, 1947.

Approved, April 25, 1947.

APPENDIX D

CHAPTER 811

LAWS OF MARYLAND, 1947

AN ACT to repeal and re-enact with amendments, Section 20 of Article 31 of the Annotated Code of Maryland (1943 Supplement), title "Debt-Public", sub-title "Public Works", as said Section 20 was amended by Chapter 645 of the Acts of 1945, relating to the time during which bonds may be issued for public works by political sub-divisions of the State and the purposes for which said sub-divisions may accept assistance of any agency of the Federal Government.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That Section 20 of Article 31 of the Annotated Code of Maryland (1943 Supplement), title "Debt-Public", sub-title "Public Works", as said Section 20 was amended by Chapter 645 of the Acts of 1945, be and it is hereby repealed and re-enacted, with amendments, to read as follows:

20. The powers conferred by this sub-title shall be in addition and supplemental to the powers conferred by any other law, and bonds, interim certificates or other obligations may be issued hereunder for any project notwithstanding that any other law, may provide for the issuance of bonds, interim certificates or other obligations for like purposes and without regard to the requirement, restrictions or other provisions contained in any other law. Bonds may be issued under this sub-title notwithstanding any debt, or other limitation prescribed by any other law, and the mode and method of procedure for issuance of bonds under this sub-title need not conform to the provisions of any other law. Any proceedings heretofore taken under any other law by any municipality relating to the subject matter of this sub-title, may

be continued under such other law or under this sub-title, or at the option of the governing body may be discontinued and new proceedings instituted under this sub-title. Except in pursuance of any contract or agreement theretofore entered into by and between any municipality and any Federal agency, no municipality shall borrow any money or issue any bonds pursuant to the provisions of this sub-title after June 1, 1949. It is the purpose of this sub-title to enable municipalities to secure the benefits of any agency of the Federal Government engaged in a works program, to encourage public works, to reduce unemployment and thereby to assist in the national recovery and promote the public welfare, and it is also the purpose of this sub-title to enable municipalities to accept and secure the assistance and benefits of any agency of the Federal Government given to encourage or to aid in the construction or acquisition of public works, made necessary by and connected with post-war reconstruction and to enable municipalities to accept and secure the benefits of any agency of the Federal Government given for or to aid in a program of public health, medical research or medical care, and to these ends municipalities shall have power to do all things necessary or convenient to carry out said purpose in addition to the express powers conferred in this sub-title. This sub-title is remedial in nature and the powers hereby granted shall be liberally construed.

SEC. 2. *And be it further enacted*, That this Act shall take effect June 1, 1947.

Approved, April 25, 1947.

APPENDIX E

CHAPTER 716

LAWS OF MARYLAND, 1947

AN ACT to add a new and additional section to Article 43 of the Annotated Code of Maryland (1939 Edition) title "Health", sub-title "Miscellaneous Provisions", to be known as Section 44B of said Article, to follow immediately after Section 44A of said Article, providing for the administration and supervision by the State Board of Health, of a mental health program.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That a new and additional section be and the same is hereby added to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", sub-title "Miscellaneous Provisions," to be known as Section 44B of said Article, to follow immediately after Section 44A of said Article and to read as follows:

44B. The State Board of Health is hereby designated as the

agency of the State to administer a program of non-institutional services for mentally ill or those who are suffering from conditions which may lead to mental illness and to coordinate and supervise the administration of those services included in the program which are not administered directly by it. The purpose of such program shall be to develop, extend and improve services for locating persons who are suffering from some mental illness and to provide facilities for diagnosis and corrective treatment of non-institutional cases.

Nothing in this Act shall be construed to amend or alter in any way, the rights and powers conferred upon the Board of Mental Hygiene.

The said State Board of Health is hereby authorized:

(a) To formulate and administer a detailed plan or plans for

the purposes herein specified, and make such rules and regulations as may be necessary or desirable for the administration of such plans.

(b) To receive and expend in accordance with such plans, all funds made available to such Board by the Federal Government, the State or its political subdivisions or from any other sources for such purposes.

(c) To cooperate with the Federal Government, through its appropriate agency or instrumentality, and all other agencies,

both public and private, in developing, extending and improving such services and in the administration of such plans.

SEC. 2. *And be it further enacted*, That all laws or parts of laws inconsistent herewith are hereby repealed to the extent of such inconsistencies.

SEC. 3. *And be it further enacted*, That this Act shall become effective June 1, 1947.

Approved April 25, 1947.

APPENDIX F

CHAPTER 210

LAWS OF MARYLAND, 1945

AN ACT to add a new sub-title and eleven new sections to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", said new sub-title to read "Hospitals", said new sections to be known as Sections 496A to 496K, inclusive, and to follow immediately after Section 496 of said Article, providing for the licensing of hospitals, authorizing the State Board of Health to promulgate rules and regulations prescribing certain minimum standards for hospitals and creating an Advisory Committee.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That a new sub-title and eleven new sections be and they are hereby added to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", said new sub-title to be known as "Hospitals", and said new sections to be known as Sections 496A to 496K, inclusive, to follow immediately after Section 496 of said Article, and to read as follows:

HOSPITALS

496A. (Definitions.) The following terms used in this sub-title are hereby defined as follows:

"Hospital" as herein used means any institution which maintains and operates facilities for the care and/or treatment of two (2) or more non-related persons as patients suffering mental or physical ailments, but shall not be construed to include any dispensary or first-aid treatment facilities maintained by any commercial or industrial plant, educational institution or convent.

"Person" shall include any person, partnership, association or corporation or any state, county or local governmental unit and any division, board or agency thereof.

496B. (Hospitals Must Obtain Licenses.) No person shall establish, conduct, maintain or operate in the State of Maryland any hospital without first having obtained a license therefor as hereinafter provided in this sub-title.

496C. (Existing Hospitals to Obtain Licenses.) No person may continue to operate an existing hospital unless such operation shall be approved and legally licensed by the State Board of Health as hereinafter provided in this sub-title; provided, however, that all hospitals in operation on the effective date of this sub-title shall be given a reasonable time to meet the minimum standards provided for in this sub-title and the rules and regulations issued thereunder.

496D. (Application for Licenses.) Any person desiring a license to open a hospital or to continue the operation of an existing hospital shall file with the State Board of Health a verified application setting forth the name of the applicant desiring such license, that the applicant is not less than twenty-one years of age and of reputable and responsible character, the class of hospital to be operated, the location thereof, the name of the person in charge thereof and such additional information as the State Board of Health may require. Applications on behalf of a corporation or association or a governmental unit or agency shall be made by any two officers thereof.

Each application for a license to operate a hospital shall be accompanied by a fee of ten dollars (\$10.00). All licenses issued hereunder shall expire one year from date of issuance. No such fee shall be refunded and all fees received by the State Board of Health under the provisions of this sub-title shall be paid into the State Treasury to the credit of the State Board of Health for the purpose of carrying out the provisions of this sub-title.

496E. (Issuance of Licenses.) The State Board of Health is

hereby authorized to issue licenses to open, maintain and operate hospitals which, after inspection, are found to comply with the provisions of this sub-title and the rules and regulations adopted thereunder by the State Board of Health. No license granted hereunder shall be assignable or transferable.

496F. (Inspections.) The State Board of Health shall cause each hospital in the State of Maryland to be periodically inspected under rules and regulations to be established by said Board of Health, as hereinafter provided.

Any hospital desiring to make any alteration or addition to its buildings and plant or any change in any of its facilities may, before making such change, alteration or addition, request the State Board of Health to approve the same, provided, however, that nothing contained in this sub-title shall be construed as in any way superseding the provisions of any local building code now in existence or hereafter enacted. Thereupon, the State Board of Health shall investigate the change, alteration or addition so contemplated to be made and as soon thereafter as reasonably practical shall notify the licensee that said change, alteration or addition is approved or disapproved with such recommendations as said State Board of Health shall care to make.

496G. (Standards Established.) The State Board of Health shall have full power and authority to make and promulgate reasonable rules and regulations classifying hospitals and prescribing minimum standards of safety and sanitation in the physical plant of diagnostic, therapeutic and laboratory facilities and equipment of each class of hospitals, provided, however, that nothing contained in this sub-title shall affect the right of each institution to employ its own personnel and staff, and provided further that said rules and regulations are not in conflict with any provisions of this sub-title. The State Board of Health may modify, amend or rescind such regulations from time to time as may be in the public interest.

496H. (Appeals.) Any person aggrieved by the refusal of the State Board of Health to issue a license may, within ten (10) days after receipt of notice of such action or failure to act, take an appeal therefrom to a court having equity jurisdiction in the County or in the City of Baltimore where such hospital is located or contemplated and a copy of such appeal shall be filed with the State Board of Health. Within five (5) days after the receipt of such copy, the State Board of Health shall transmit to such court all the original papers pertaining to such application, and such appeal shall thereafter be heard by such court as promptly as circumstances will reasonably permit. Such hearing may be heard upon the record so transmitted, but the court may hear such additional evidence as it may deem proper, and upon the conclusion of such hearing, the court may affirm, vacate or modify the order appealed from. Any party to said proceeding may appeal from the decision of such court to the Court of Appeals of Maryland, the procedure therein to be the same as in appeals from the action of equity courts.

496-I. (Advisory Board.) An advisory Board of seven (7) members, each of whom shall hold office for a period of five (5) years, shall be appointed by the Governor to make recommendations to the State Board of Health and to assist in the establishment of minimum standards under the provisions of this sub-title and any amendments thereto. Three (3) members of said Advisory Board shall be appointed from a list of names submitted by the Medical and Chirurgical Faculty of Maryland. Four (4) members of said

Advisory Board shall be appointed from a list of names submitted by the Maryland-District of Columbia Hospital Association of which two (2) shall be superintendents of Maryland hospitals and one (1) shall be a trustee of a Maryland hospital and at least one (1) of whom shall be a member of the Medical and Chirurgial Faculty of Maryland. At least four (4) members of the Advisory Board shall be doctors of medicine and members of the Medical and Chirurgial Faculty of Maryland. Of the original committee, one (1) member shall be appointed for a term of one (1) year, two (2) for a term of two (2) years, one (1) for a term of three (3) years, two (2) for a term of four (4) years, and one (1) for a term of five (5) years, from June 1, 1945 and thereafter their successors shall be appointed for a term of five (5) years. All members of said Advisory Board shall be citizens and residents of the State of Maryland for a period of at least one year immediately prior to appointment; at least two (2) shall be residents of the City of Baltimore; at least two (2) shall be residents of the counties; and all members shall serve without compensation. Meetings of said Advisory Board may be called by the State Board of Health or

by any three members of the Advisory Board on proper notice.

496J. (Violations—Penalties.) Any person maintaining and operating a hospital without a license shall be guilty of a misdemeanor, and upon conviction thereof shall be liable to a fine of not more than One Hundred Dollars (\$100.00) for the first offense and not more than Five Hundred Dollars (\$500.00) for each subsequent offense, and each day such hospital shall operate after a first conviction shall be considered a second offense.

496K. (Saving Section.) If any provision of this sub-title, or the application thereof to any person or circumstances, is held invalid, the remainder of this sub-title and the application of such provision to other persons or circumstances shall not be affected thereby. If any provision, clause, sentence or section of this sub-title shall be declared to be invalid or in violation of any provision of the State or Federal Constitution, the remainder of this sub-title shall stand and be effective notwithstanding.

SEC. 2. *And be it further enacted*, That this Act shall take effect June 1, 1945.

Approved March 8, 1945.

APPENDIX G

CHAPTER 421

LAWS OF MARYLAND, 1945

AN ACT to repeal and re-enact with amendments Section 526 of Article 43 of the Annotated Code of Maryland (1943 Supp.), title "Health," sub-title "Chronic Hospitals and Infirmaries," increasing the number of chronic hospitals and infirmaries and specifying their location.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That Section 526 of Article 43 of the Annotated Code of Maryland (1943 Supp.), title "Health," sub-title "Chronic Hospitals and Infirmaries," be and the same is hereby repealed and re-enacted with amendments so as to read as follows:

526. The State Board of Health is authorized to establish three institutions for needy persons from the various counties and Baltimore City who require medical, nursing or custodial care by reason of chronic illness or infirmity; one of which shall be located in one of the nine counties on the Eastern Shore, one in the eastern part of the Western Shore convenient and accessible to Baltimore City, Baltimore, Anne Arundel, Carroll, Howard, and Harford Counties, and one on the Western Shore in Western Maryland, at points

to be selected by said Board with the approval of the Board of Public Works. The cost of the erection and equipment of said institutions (including the cost of acquiring appropriate sites) shall be paid out of appropriations in the budget, or in any bond issue bill making appropriations for the purpose. Each institution shall contain two sections, one of which shall be a chronic hospital and the other an infirmary, and proper provision for both the white and colored races shall be made. In selecting sites and making architectural plans for each institution, provision shall be made for possible expansion and for the later addition of a unit for the treatment of chronic diseases of children. The State Board of Health shall appoint a superintendent and such other personnel as may be necessary, within the limits of the budgetary appropriations, for each institution.

SEC. 2. *And be it further enacted*, That this Act shall take effect on June 1, 1945.

Approved March 29, 1945.

APPENDIX H

CHAPTER 170

LAWS OF MARYLAND, 1943

AN ACT to add a new sub-title and five new sections to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", said new sub-title to read "Chronic Hospitals and Infirmaries", and said new sections to be known as Sections 526 to 530, inclusive, and to follow immediately after Section 525 of said Article, providing for the establishment of Chronic Hospitals and Infirmaries and their management and maintenance.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That a new sub-title and five new sections be and they are hereby added to Article 43 of the Annotated Code of Maryland (1939 Edition), title "Health", said new sub-title to be known as "Chronic Hospitals and Infirmaries", and said new sections to be known as Sections 526 to 530, inclusive, to follow immediately after Section 525 of said Article, and to read as follows:

CHRONIC HOSPITALS AND INFIRMARIES

526. The State Board of Health is authorized to establish two institutions for needy persons from the various counties and

Baltimore City who require medical, nursing or custodial care by reason of chronic illness or infirmity; one of which shall be located in one of the nine counties on the Eastern Shore and one in one of the fourteen counties on the Western Shore, at points to be selected by said Board with the approval of the Board of Public Works. The cost of the erection and equipment of said institutions (including the cost of acquiring appropriate sites) shall be paid out of appropriations in the budget, or in any bond issue bill making appropriations for the purpose. Each institution shall contain two sections, one of which shall be a chronic hospital and the other an infirmary, and proper provisions for both the white and colored races shall be made. In selecting sites and making architectural plans for each institution, provision shall be made for possible expansion and for the later addition of a unit for the treatment of chronic diseases of children. The State Board of Health shall appoint a superintendent and such other personnel as may be necessary, within the limits of the budgetary appropriations, for each institution.

527. Admission to the chronic hospitals and infirmaries shall

be made on the basis of a statement by a physician who, after an examination, finds that the patient is in need of chronic hospital or infirmary care, and of a further statement by the local County Welfare Board or the Department of Welfare of Baltimore City that the patient is unable to pay for the cost of his care. Final arrangements for admission shall be made only after the County Commissioners of the County or the Department of Welfare of Baltimore City where the applicant resides have given their approval. No patient shall be admitted who has tuberculosis in a transmissible form, mental disease of the type requiring care in a mental hospital, an orthopedic disease of a type admissible to the special orthopedic hospitals, or who is under the age of sixteen years.

528. No patient shall be admitted who is able to pay the cost of proper hospital care elsewhere. In all cases admitted, there shall be collected from the patient or his family as much of the actual cost of maintenance as is reasonably possible, but no case shall pay above the actual per diem cost calculated on the basis of the total cost of running the institutions.

529. For each patient admitted to either of the chronic hospitals and infirmaries from any county of the State or Baltimore City, the County Commissioners of said county and the Mayor and City Council of Baltimore shall pay into the State Treasury the sum of

seventy-five cents per day, as long as said patient remains in such institution. The remaining cost of board, care and treatment, and the cost of operation shall be paid out of appropriations in the budget. Said charge of seventy-five cents per day shall be collectible by the State Comptroller in the same manner as in the case of patients admitted to the insane hospitals of the State, as provided in Section 49 of Article 59 of the Code and the Comptroller shall have the power to determine, in the event of any dispute as to residence, which one of two or more counties may be responsible for such charge.

530. Each of the chronic hospitals and infirmaries shall have a Board of Visitors consisting of one member of the Board of County Commissioners for each County and the Director of the Department of Welfare of Baltimore City in the area served by such institution, said member to be selected by said Board of County Commissioners. The Board of Visitors shall make periodic visits to the institution and make suggestions to the State Board of Health concerning the conduct and maintenance of the chronic hospitals and infirmaries.

SEC. 2. *And be it further enacted*, That this Act shall take effect June 1, 1943.

Approved March 18, 1943.

APPENDIX I
POPULATION OF MARYLAND BY COUNTY 1943, 1940, 1930, AND 1920

COUNTY	1943 ¹	1940 ²	1930 ²	1920 ²	PER CENT CHANGE		
					1920-1930 ²	1930-1940 ²	1940-1943
Allegany.....	81,302	86,973	79,098	69,938	13.1	10.0	- 6.5
Anne Arundel.....	77,070	68,375	55,167	49,408	27.1	23.9	12.7
Baltimore.....	202,425	155,825	124,565	74,817	66.5	25.1	29.9
Calvert.....	10,549	10,484	9,528	9,744	-2.2	10.0	0.6
Caroline.....	16,047	17,549	17,387	18,652	-6.8	0.9	- 8.6
Carroll.....	39,399	39,054	35,978	34,245	5.1	8.5	0.9
Cecil.....	32,055	26,407	25,827	23,612	9.4	2.2	21.4
Charles.....	19,784	17,612	16,166	17,705	-8.7	8.9	12.3
Dorchester.....	24,264	28,006	26,813	27,895	-3.9	4.4	-13.4
Frederick.....	51,774	57,312	54,440	52,541	3.6	5.3	- 9.7
Garrett.....	18,534	21,981	19,908	19,678	1.2	10.4	-15.7
Harford.....	42,890	35,060	31,603	29,291	7.9	10.9	22.3
Howard.....	18,481	17,175	16,169	15,826	2.2	6.2	7.6
Kent.....	13,071	13,465	14,242	15,026	-5.2	- 5.5	- 2.9
Montgomery.....	104,155	83,912	49,206	34,921	40.9	70.5	24.1
Prince George's.....	117,625	89,490	60,095	43,347	38.6	48.9	31.4
Queen Anne's.....	12,194	14,476	14,571	16,001	-8.9	- 0.7	-15.8
St. Mary's.....	17,877	14,626	15,189	16,112	-5.7	- 3.7	22.2
Somerset.....	17,269	20,965	23,382	24,602	-5.0	-10.3	-17.6
Talbot.....	16,190	18,784	18,583	18,306	1.5	1.1	-13.8
Washington.....	69,890	68,838	65,882	59,694	10.4	4.5	1.5
Wicomico.....	32,960	34,530	31,229	28,165	10.9	10.6	- 1.5
Worcester.....	19,201	21,245	21,624	22,309	-3.1	- 1.8	- 9.6
County totals.....	1,055,006	962,144	826,652	715,835	15.5	16.4	9.7
Baltimore City.....	927,941	859,100	804,874	733,826	9.7	6.7	8.0
STATE TOTALS.....	1,982,947	1,821,244	1,631,526	1,449,661	12.5	11.6	8.9

¹United States Bureau of the Census, Estimated Civilian Population, 1943.²United States Bureau of the Census, 16th Census of the United States, 1940.

APPENDIX J
POPULATION OF MARYLAND BY RACE AND COUNTY, 1919 AND 1915

COUNTY	1940 ¹			1945 ²		
	Total	White	Nonwhite	Total	White	Nonwhite
Allegany.....	86,973	85,651	1,322	81,302	80,082	1,220
Anne Arundel.....	68,375	50,524	17,851	77,070	56,955	20,115
Baltimore.....	155,825	145,295	10,530	202,425	188,660	13,765
Calvert.....	10,484	5,604	4,880	10,549	5,633	4,916
Caroline.....	17,549	14,102	3,447	16,047	12,886	3,161
Carroll.....	39,054	36,973	2,081	39,399	37,311	2,088
Cecil.....	26,407	24,051	2,356	32,055	29,170	2,885
Charles.....	17,612	10,384	7,228	19,784	11,673	8,111
Dorchester.....	28,006	19,917	8,089	24,264	17,252	7,012
Frederick.....	57,312	52,607	4,705	51,774	47,529	4,245
Garrett.....	21,981	21,976	5	18,534	18,534	0
Harford.....	35,060	31,076	3,984	42,890	38,001	4,889
Howard.....	17,175	14,369	2,806	18,481	15,469	3,012
Kent.....	13,465	9,404	4,061	13,071	9,124	3,947
Montgomery.....	83,912	74,986	8,926	104,155	93,115	11,040
Prince George's.....	89,490	73,217	16,273	117,625	96,217	21,408
Queen Anne's.....	14,476	10,129	4,347	12,194	8,524	3,670
St. Mary's.....	14,626	9,901	4,725	32,318	26,794	5,524
Somerset.....	20,965	13,904	7,061	17,269	11,449	5,820
Talbot.....	18,784	13,048	5,736	16,190	11,252	4,938
Washington.....	68,838	67,048	1,790	69,890	68,073	1,817
Wicomico.....	34,530	27,035	7,495	32,960	25,808	7,152
Worcester.....	21,245	14,575	6,670	19,201	13,172	6,029
County totals.....	962,144	825,776	136,368	1,069,447	919,186	150,261
Baltimore City.....	859,100	692,705	166,395	930,000	751,000	179,000
STATE TOTALS.....	1,821,244	1,518,481	302,763	1,999,447	1,670,186	329,261

¹United States Bureau of the Census, 16th Census of the United States, 1940.²Maryland State Department of Health, Bureau of Vital Statistics.

APPENDIX K

COMPOSITION OF POPULATION IN MARYLAND BY COUNTY, URBAN, RURAL NONFARM, AND RURAL FARM, 1940¹

COUNTY	POPULATION 1940	URBAN		RURAL NONFARM		RURAL FARM	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Allegany	86,973	50,707	58.3	30,054	34.6	6,212	7.1
Anne Arundel	68,375	13,069	19.1	43,451	63.5	11,855	17.3
Baltimore	155,825	28,802	87.5	102,167	10.1	24,856	2.4
Baltimore City	859,100	859,100		—		—	
Calvert	10,484	—	—	3,586	34.2	6,898	65.8
Caroline	17,549	—	—	9,375	53.4	8,174	46.6
Carroll	39,054	4,692	12.0	19,784	50.7	14,578	37.3
Cecil	26,407	3,518	13.3	14,565	55.2	8,324	31.5
Charles	17,612	—	—	7,929	45.0	9,683	55.0
Dorchester	28,006	10,102	36.1	9,541	34.1	8,363	29.9
Frederick	57,312	19,658	34.3	18,453	32.2	19,201	33.5
Garrett	21,981	—	—	10,962	49.9	11,019	50.1
Harford	35,060	4,967	14.2	15,730	44.9	14,363	41.0
Howard	17,175	—	—	10,522	61.3	6,653	38.7
Kent	13,465	2,760	20.5	6,501	48.3	4,204	31.2
Montgomery	83,912	7,650	9.1	62,170	74.1	14,092	16.8
Prince George's	89,490	18,347	20.0	55,829	62.4	15,314	17.1
Queen Anne's	14,476	—	—	7,348	50.8	7,128	49.2
St. Mary's	14,626	—	—	6,433	44.0	8,193	56.0
Somerset	20,965	3,908	18.6	10,716	51.1	6,341	30.2
Talbot	18,784	4,528	24.1	7,539	40.1	6,717	35.8
Washington	68,838	32,491	47.2	23,842	34.6	12,505	18.2
Wicomico	34,530	13,313	38.6	11,069	32.1	10,148	29.4
Worcester	21,245	2,739	12.9	10,267	48.3	8,239	38.8
STATE OF MARYLAND	1,821,244	1,080,351	59.3	497,833	27.3	243,060	13.3

¹United States Bureau of the Census, 16th Census of the United States, 1940.

APPENDIX L

PER CAPITA INCOME IN MARYLAND BY COUNTY, 1940 AND 1945

COUNTY	POPULATION 1940 ¹	GROSS INCOME 1940 ²	PER CAPITA INCOME, 1940	POPULATION 1945 ³	GROSS INCOME 1945 ⁴	PER CAPITA INCOME, 1945
Allegany	86,973	\$52,198,000	\$600.16 (3)	82,302	\$104,127,000	\$1,280.74 (5)
Anne Arundel	68,375	32,277,000	472.06 (15)	77,070	65,715,000	852.67 (15)
Baltimore	155,825	735,844,000	725.02 (1)	202,425	1,753,133,000	1,548.12 (1)
Baltimore City	859,100			930,000		
Calvert	10,484	3,854,000	367.61 (19)	10,549	7,842,000	743.39 (21)
Caroline	17,549	8,308,000	473.42 (14)	16,047	16,918,000	1,054.28 (10)
Carroll	39,054	20,318,000	520.25 (10)	39,399	41,367,000	1,049.95 (11)
Cecil	26,407	12,659,000	479.38 (13)	32,055	25,773,000	804.02 (18)
Charles	17,612	5,634,000	319.90 (20)	19,784	11,462,000	579.36 (22)
Dorchester	28,006	12,682,000	452.83 (17)	24,264	25,813,000	1,063.84 (9)
Frederick	57,312	33,391,000	582.62 (6)	51,774	60,952,000	1,177.27 (7)
Garrett	21,981	6,852,000	311.72 (21)	18,534	13,949,000	752.62 (20)
Harford	35,060	17,252,000	492.07 (11)	42,890	35,119,000	818.82 (16)
Howard	17,175	7,816,000	455.08 (16)	18,481	15,925,000	861.70 (13)
Kent	13,465	7,773,000	577.27 (8)	13,071	15,814,000	1,209.85 (6)
Montgomery	83,912	44,026,000	524.67 (9)	104,155	89,633,000	860.57 (14)
Prince George's	89,490	43,670,000	487.99 (12)	117,625	92,912,000	789.90 (19)
Queen Anne's	14,476	5,397,000	372.82 (18)	12,194	10,991,000	901.34 (12)
St. Mary's	14,626	4,053,000	277.11 (22)	32,318	8,243,000	255.06 (23) ⁵
Somerset	20,965	5,454,000	260.15 (23)	17,269	14,100,000	816.49 (17)
Talbot	18,784	10,984,000	584.75 (5)	16,190	22,353,000	1,380.67 (2)
Washington	68,838	39,837,000	578.71 (7)	69,890	81,108,000	1,160.51 (8)
Wicomico	34,530	21,308,000	617.09 (2)	32,960	43,382,000	1,316.20 (4)
Worcester	21,245	12,714,000	598.45 (4)	19,201	25,873,000	1,347.48 (3)
STATE OF MARYLAND	1,821,244	\$1,144,301,000	\$628.31	1,999,447	\$2,582,504,000	\$1,291.61

NOTE: Numbers in parentheses give relative position of county in State.

¹United States Bureau of the Census, 16th Census of the United States, 1940.

²"Gross effective buying income," as used in *Sales Management*, April 10, 1941.

³Maryland State Department of Health, Bureau of Vital Statistics.

⁴"Gross effective buying income," as used in *Sales Management*, May 10, 1946.

⁵The 1945 population estimates of the State Department of Health are the same as the 1943 U. S. Bureau of the Census estimates for all the counties of Maryland, except St. Mary's County. Therefore, it would be advisable to consider both the 1945 and 1943 figures for this County in order to arrive at a more valid picture of its economic status. The 1945 per capita income of \$255.06, given above, shows a decrease from the 1940 per capita income. However, on the basis of the lower estimated population of 17,877 for 1943, St. Mary's 1945 per capita income rises to \$461.10, thereby showing an increase over 1940. In either instance, its relative position among the counties of the State remains unchanged.

APPENDIX M

POPULATION PER SQUARE MILE IN MARYLAND BY COUNTY, 1943

COUNTY	POPULATION 1943 ¹	LAND AREA IN SQUARE MILES ²	POPULATION PER SQUARE MILE
Allegany.....	81,302	426 (12)	190.8 (4)
Anne Arundel.....	77,070	417 (13)	184.8 (5)
Baltimore.....	202,425	610 (3)	331.8 (1)
Calvert.....	10,549	219 (28)	48.2 (17)
Caroline.....	16,047	320 (19)	50.1 (15)
Carroll.....	39,399	456 (10)	86.4 (10)
Cecil.....	32,055	352 (17)	91.1 (8)
Charles.....	19,784	458 (9)	43.2 (19)
Dorchester.....	24,264	580 (4)	41.8 (20)
Frederick.....	51,774	664 (2)	78.0 (11)
Garrett.....	18,534	668 (1)	27.7 (23)
Harford.....	42,890	448 (11)	95.7 (7)
Howard.....	18,481	251 (22)	73.6 (12)
Kent.....	13,071	284 (20)	46.0 (18)
Montgomery.....	104,155	494 (5)	210.8 (3)
Prince George's.....	117,625	485 (6)	242.5 (2)
Queen Anne's.....	12,194	373 (15)	32.7 (22)
St. Mary's.....	17,877	367 (16)	48.7 (16)
Somerset.....	17,269	332 (18)	52.0 (14)
Talbot.....	16,190	279 (21)	58.0 (13)
Washington.....	69,890	462 (8)	151.3 (6)
Wicomico.....	32,960	380 (14)	86.7 (9)
Worcester.....	19,201	483 (7)	39.8 (21)
County totals.....	1,055,006	9,808	107.6
Baltimore City.....	927,941	79	11,746.1
STATE TOTALS....	1,982,947	9,887	200.6

NOTE: Numbers in parentheses give relative position of county in State.

¹United States Bureau of the Census, Estimated Civilian Population, 1943.²United States Bureau of the Census, 16th Census of the United States, 1940.

APPENDIX N

NUMBER OF PHYSICIANS IN MARYLAND BY COUNTY, 1947

COUNTY	NUMBER OF RESIDENT PHYSICIANS ¹	RESIDENTS PER PHYSICIAN ²
Allegany.....	70	1,161
Anne Arundel.....	42	1,835
Baltimore.....	167	1,212
Calvert.....	5	2,110
Caroline.....	13	1,234
Carroll.....	27	1,459
Cecil.....	18	1,781
Charles.....	11	1,799
Dorchester.....	21	1,155
Frederick.....	49	1,057
Garrett.....	7	2,648
Harford.....	28	1,532
Howard.....	12	1,540
Kent.....	18	726
Montgomery.....	97	1,074
Prince George's.....	37	3,179
Queen Anne's.....	8	1,524
St. Mary's.....	12	1,490
Somerset.....	17	1,016
Talbot.....	21	771
Washington.....	65	1,075
Wicomico.....	36	916
Worcester.....	14	1,372
COUNTY TOTALS.....	795	1,327

¹Reported by County Health Officers.²According to United States Bureau of the Census, Estimated Civilian Population, 1943.

APPENDIX O

TOTAL BIRTHS AND BIRTHS IN HOSPITALS IN MARYLAND BY RACE AND COUNTY, 1945¹

COUNTY	TOTAL BIRTHS			BIRTHS IN HOSPITALS					
	Total	White	Nonwhite	NUMBER			PER CENT TOTAL BIRTHS		
				Total	White	Nonwhite	Total	White	Nonwhite
Allegany.....	1,724	1,691	33	1,421	1,397	24	82.4	82.6	72.7
Anne Arundel.....	1,819	1,392	427	1,213	1,094	119	66.7	78.6	27.9
Baltimore.....	5,174	4,751	423	4,155	3,923	232	80.3	82.6	54.8
Calvert.....	312	156	156	182	120	62	58.8	76.9	39.7
Caroline.....	329	248	81	179	174	5	54.4	70.2	6.2
Carroll.....	702	666	42	378	369	9	53.4	55.4	21.4
Cecil.....	605	652	50	548	514	34	78.1	78.8	68.0
Charles.....	462	304	301	315	262	53	52.1	86.2	17.6
Dorchester.....	1,141	1,029	112	798	708	58	66.7	83.9	35.4
Frederick.....	424	424	0	165	165	0	69.9	68.8	80.4
Garrett.....	1,090	994	96	867	815	52	38.9	38.9	0.0
Harford.....	381	317	64	212	194	18	79.5	82.0	54.2
Howard.....	246	166	80	156	136	20	55.6	61.2	28.1
Kent.....	2,694	2,463	231	2,457	2,308	149	68.4	81.9	25.0
Montgomery.....	2,992	2,529	463	2,675	2,393	282	91.2	93.7	64.5
Prince George's.....	260	178	82	110	106	4	89.4	94.6	60.9
Queen Anne's.....	708	540	168	460	442	18	42.3	59.5	4.9
St. Mary's.....	357	199	158	173	152	21	65.0	81.9	10.7
Somerset.....	330	220	110	206	198	8	48.5	76.4	13.3
Talbot.....	1,467	1,451	16	1,050	1,040	10	62.4	90.0	7.3
Washington.....	636	471	165	444	388	56	71.6	71.7	62.5
Wicomico.....	407	231	176	159	143	16	69.8	82.4	33.9
Worcester.....							39.1	61.9	9.1
County totals.....	24,968	21,370	3,598	18,631	17,291	1,340	74.6	80.9	37.2
Baltimore City.....	17,848	13,308	4,540	14,622	11,739	2,883	81.9	88.2	63.5
STATE TOTALS.....	42,816	34,678	8,138	33,253	29,030	4,223	77.7	83.7	51.9

¹Maryland State Department of Health, Bureau of Vital Statistics.

APPENDIX P
PER CAPITA CIVILIAN HOSPITAL RESOURCES BY STATE¹

STATES ARRANGED BY PER CAPITA INCOME	PER CAPITA INCOME	POPULATION 1944	BEDS PER 1,000 PERSONS	INDEX OF BEDS PER 1,000 POPULATION PER \$100 AVERAGE INCOME PER PERSON	HOSPITAL FACILITIES VALUATION PER CAPITA	HOSPITAL MAINTENANCE EXPENSE PER CAPITA
	(1)	(2)	(3)	(4)	(5)	(6)
1. Connecticut.....	\$1,431	1,776,807	12.54	.876	\$47.01	\$13.52
2. Nevada.....	1,372	156,445	7.52	.548	15.33	3.66
3. California.....	1,366	8,746,989	9.17	.671	22.50	11.13
4. New York.....	1,343	12,632,890	15.00	1.116	57.75	16.43
5. Washington.....	1,336	2,055,378	9.79	.733	21.14	9.31
6. Delaware.....	1,287	283,802	12.67	.984	47.78	11.85
7. New Jersey.....	1,261	4,167,840	11.02	.874	39.97	10.57
8. District of Columbia.....	1,254	926,260	16.06	1.281	46.88	17.87
9. Oregon.....	1,204	1,214,226	10.17	.845	21.89	8.72
10. Rhode Island.....	1,198	778,972	10.40	.868	38.10	9.94
11. Michigan.....	1,183	5,429,641	10.88	.920	33.09	12.11
12. Massachusetts.....	1,177	4,162,815	14.68	1.247	42.24	14.58
13. Illinois.....	1,175	7,729,720	11.54	.982	32.36	11.53
14. Maryland.....	1,169	2,127,874	10.64	.910	36.34	10.90
15. Ohio.....	1,167	6,836,667	8.59	.736	27.86	9.05
16. Pennsylvania.....	1,048	9,247,088	10.96	1.046	40.73	9.44
17. Indiana.....	1,040	3,419,707	7.57	.728	30.27	8.45
18. Montana.....	1,008	464,999	9.81	.973	28.79	10.87
19. Utah.....	972	606,994	6.77	1.170	21.00	5.40
20. Maine.....	968	793,600	10.48	.699	27.17	10.42
21. Wisconsin.....	966	2,975,910	11.15	1.085	27.79	9.47
22. Kansas.....	961	1,174,447	8.70	.905	17.82	7.08
23. Iowa.....	936	2,269,759	9.32	.996	19.69	7.29
24. Colorado.....	935	1,147,259	11.88	1.271	30.66	10.56
25. Wyoming.....	934	257,108	14.91	1.596	30.90	15.95
26. Idaho.....	930	531,573	7.21	.775	14.27	5.15
27. Nebraska.....	920	1,213,792	9.34	1.015	21.53	7.54
28. Missouri.....	885	3,589,538	9.63	1.088	30.49	7.87
29. Minnesota.....	876	2,508,663	11.69	1.334	30.51	10.54
30. North Dakota.....	872	528,071	11.88	1.362	24.03	9.05
31. Vermont.....	863	310,941	12.86	1.490	30.11	9.67
32. Arizona.....	833	638,412	8.90	1.068	25.62	8.71
33. Florida.....	828	2,367,217	6.02	.727	10.47	4.99
34. South Dakota.....	817	558,629	9.81	1.201	23.17	6.50
35. Virginia.....	814	3,199,115	7.35	.903	14.70	6.28
36. New Hampshire.....	804	457,231	12.49	1.553	31.02	10.11
37. Texas.....	791	6,876,248	6.60	.834	15.67	6.23
38. Oklahoma.....	720	2,064,679	8.04	1.117	13.64	4.36
39. West Virginia.....	692	1,715,984	7.24	1.046	22.35	5.88
40. Louisiana.....	698	2,535,385	7.41	1.093	22.74	5.76
41. New Mexico.....	660	532,212	7.61	1.153	23.57	6.29
42. Tennessee.....	645	2,870,158	6.34	.983	15.47	4.98
43. Georgia.....	624	3,223,727	5.57	.893	11.33	4.11
44. North Carolina.....	606	3,534,545	6.17	1.018	18.11	5.26
45. Kentucky.....	589	2,630,194	6.14	1.042	13.22	4.40
46. Alabama.....	579	2,818,083	5.36	.926	10.38	4.82
47. South Carolina.....	560	1,923,354	5.65	1.009	13.79	4.29
48. Arkansas.....	522	1,776,446	7.53	1.443	14.76	5.07
49. Mississippi.....	468	2,175,877	4.56	1.026	7.89	2.72
50. Alaska.....	—	72,524	10.62	—	21.38	14.47
51. Hawaii.....	—	423,329	12.21	—	28.25	13.02
52. Puerto Rico.....	—	1,869,245	3.47	—	5.18	2.91

Col. 1—1942-44. Source: *Survey of Current Business*, August 1945.

Col. 2—1944 Estimate: United States Bureau of the Census (excludes members of armed forces overseas).

Col. 3—Source: 1945 *American Hospital Directory* estimate based on reports from civilian hospitals primarily recognized by the American Medical Association; includes all types of service—general, mental, tuberculosis, and special.

Col. 4—Index obtained by dividing Col. 3 by Col. 2 expressed in \$100 units of income.

Cols. 5 and 6—*Ibid.*: Estimate based on reports from hospitals representing 70.4 to 77.3 per cent of recognized bed capacity.

Col. 6—Does not include contractual or corporate charges, e.g., taxes, insurance, interest.

¹Reprinted from *Hospitals*, March 1946.

